

HAMPTON ROADS
METROPOLITAN PLANNING ORGANIZATION
**UNIFIED PLANNING
WORK PROGRAM**
FY 2009



MARCH 2008

HAMPTON ROADS METROPOLITAN PLANNING ORGANIZATION

CHESAPEAKE

* CLIFTON E. HAYES, JR.

GLOUCESTER COUNTY

* LANE B. RAMSEY

HAMPTON

* RANDALL A. GILLILAND

ISLE OF WIGHT COUNTY

* STAN D. CLARK

JAMES CITY COUNTY

* BRUCE C. GOODSON

NEWPORT NEWS

* JOE S. FRANK

NORFOLK

* PAUL D. FRAIM

POQUOSON

* CHARLES W. BURGESS, JR.

PORTSMOUTH

* DOUGLAS L. SMITH

SUFFOLK

* SELENA CUFFEE-GLENN

VIRGINIA BEACH

* LOUIS R. JONES

WILLIAMSBURG

* JACKSON C. TUTTLE, II

YORK COUNTY

* JAMES O. McREYNOLDS

HAMPTON ROADS PLANNING DISTRICT COMMISSION

* ARTHUR L. COLLINS, Executive Director/Secretary

TRANSPORTATION DISTRICT COMMISSION OF HAMPTON ROADS

* MICHAEL S. TOWNES, President/Chief Executive Officer

WILLIAMSBURG AREA TRANSPORT

* MARK D. RICKARDS, Executive Director

VIRGINIA DEPARTMENT OF TRANSPORTATION

* DENNIS W. HEUER, District Administrator – Hampton Roads District

FEDERAL HIGHWAY ADMINISTRATION

ROBERTO FONSECA-MARTINEZ, Division Administrator – Virginia Division

FEDERAL TRANSIT ADMINISTRATION

LETITIA A. THOMPSON, Regional Administrator, Region 3

FEDERAL AVIATION ADMINISTRATION

TERRY PAGE, Manager, Washington Airports District Office

VIRGINIA DEPARTMENT OF AVIATION

RANDALL P. BURDETTE, Director

VIRGINIA PORT AUTHORITY

JERRY A. BRIDGES, Executive Director

*VOTING MEMBERS

MPO PROJECT STAFF

Hampton Roads MPO Staff

Arthur L. Collins	Executive Director/Secretary
Dwight L. Farmer	Deputy Executive Director, Transportation
Camelia Ravanbakht	Principal Transportation Engineer
Robert B. Case	Principal Transportation Engineer
Michael S. Kimbrel	Principal Transportation Engineer
Andrew C. Pickard	Senior Transportation Engineer
Samuel S. Belfield	Senior Transportation Engineer
Keith M. Nichols	Senior Transportation Engineer
Joseph D. Paulus	Special Transportation Advisor
Laura L. Surface	Transportation GIS Planner
Nicole C. Fox	Transportation Engineer
Dale M. Stith	Transportation Planner
Jessica M. Banks	Transportation Analyst
Kelli E. Peterson	Executive Assistant
Frances D. Hughey	Administrative Assistant II
Marla K. Frye	Administrative Assistant II
Robert C. Jacobs	Director of Graphics & Printing Services
Michael R. Long	Graphic Artist/Illustrator Technician II
Brian Z. Miller	Graphic Technician II
Christopher Vaigneur	Reprographic Supervisor

Hampton Roads Transit Staff

Jayne Whitney	Senior Vice President for Development
Keisha Branch	Chief Grants and Budget Officer
Laura Varden	Transit Development Manager
Scott Demharter	Director of Energy Management & Sustainability
Ron Hodges	TRAFFIX Program Director

Williamsburg Area Transport Staff

Richard Drumwright	Director of Planning and Development
--------------------	--------------------------------------

Virginia Department of Transportation

Eric Stringfield	District Transportation Planning Manager
------------------	--

HAMPTON ROADS METROPOLITAN PLANNING ORGANIZATION

UNIFIED PLANNING WORK PROGRAM

FY 2009

MARCH 2008

Revised: 4/16/08 – Revised amount of Section 5303 funding on Task 1.1
Revised: 5/21/08 – Added Task 7.6: Multimodal Planning Grant
Revised: 7/16/08 – Added work element within Task 7.1 for a best practices of MPO's study
Revised: 8/27/08 – Administratively modified the budget for Task 6.5 to reflect actual carryover of \$48,523 FY- 08 Section 5303 funds versus estimated carryover of \$32,000

Table of Contents

	Page
I. INTRODUCTION	1
Planning Priorities	1
Planning Factors	3
Definitions	4
Frequently Used Abbreviations	8
Frequently Used Terms	10
MPO Standing Committees	12
II. TASKS	
1.0 MAINTENANCE OF THE MPO ADMINISTRATIVE PROCESSES	13
1.1 Metropolitan Planning Organization (MPO) Administration	13
1.2 Unified Planning Work Program (UPWP)	16
1.3 Virginia Department of Transportation (VDOT) Support	18
2.0 PUBLIC PARTICIPATION	21
2.1 Transportation Public Participation	21
3.0 LONG-RANGE TRANSPORTATION PLANNING	24
3.1 Maintenance and Use of the 2030 Regional Transportation Models	24
3.2 Development of the Hampton Roads 2034 Long-Range Transportation Plan (LRP)	26
4.0 TRANSPORTATION PROJECT PROGRAMMING	29
4.1 Transportation Improvement Program (TIP)	29
5.0 MANAGEMENT SYSTEMS	31
5.1 Congestion Management Process (CMP)	31
5.2 Transportation Demand Management (TDM)	34
5.3 Intelligent Transportation System and Operations Planning	36
5.4 Regional Freight Planning	38
6.0 TRANSIT PLANNING	40
6.1 Coordinated Public Transit – Human Services Transportation Plan	40
6.2 TDCHR – Performance Monitoring and Evaluation	43
6.3 WAT – Performance Monitoring and Evaluation	46
6.4 Feasibility/Corridor Studies	51
6.5 Disadvantaged Business Enterprise Planning	53
6.6 ISO 14001:2004 Planning and Registration	55
6.7 Transit Center Upgrades	57
6.8 Regional Transportation Demand Management (TDM) Program (TRAFFIX)	58
7.0 SPECIAL STUDIES	64
7.1 Critical Issues in Transportation	64
7.2 Non-Driver Transportation Study	65
7.3 Coliseum Central Special Events Management Plan Study	66
7.4 Suffolk Corridor Studies	68
7.5 North Main Street Corridor Study	70
7.6 Multimodal Planning Grant	70.1
8.0 TRANSPORTATION DATABASE MANAGEMENT	71
8.1 Transportation Database/Geographic Information System Activities	71
8.2 Regional Travel Time Study	73

Table of Contents (Continued)

	Page
9.0 AIR QUALITY PLANNING	75
9.1 Transportation Air Quality Planning.....	75
10.0 TECHNICAL SUPPORT	77
10.1 Transportation Technical Support	77
 III. SUMMARY BUDGET/FUNDING INFORMATION	
1. Budget Summary Table.....	80
2. Funding Sources Summary Table.....	81

INTRODUCTION

The Hampton Roads Metropolitan Planning Organization (HRMPO) Unified Planning Work Program (UPWP) describes transportation planning work to be performed for the Hampton Roads metropolitan planning area (MPA) by the MPO, Hampton Roads Transit (HRT), Williamsburg Area Transport (WAT), and the Virginia Department of Transportation (VDOT) for the next one to two year period. Each task in the UPWP includes information on who will perform the work, the schedule for completing the work, resulting end products, and proposed funding and source of funds. In addition, tables at the end of the UPWP summarize the total amounts and sources of federal funds as well as funds used to provide the required match for the federal funds.

PLANNING PRIORITIES

Section 450.308(c) of the Metropolitan Planning regulations states that Transportation Management Area (TMA) designated MPOs shall include a discussion of the planning priorities facing the metropolitan planning area.

The Hampton Roads MPO is responsible to carry out a continuing, cooperative, and comprehensive transportation planning process (3C process) resulting in plans and programs consistent with the planning objectives of the metropolitan area. The FY 2009 tasks and planning activities are structured and organized to meet all federal MPO planning regulations and maintain MPO compliance with the requirements of SAFETEA-LU, the Americans with Disabilities Act (ADA), the Clean Air Act (CAA), the Civil Rights Act of 1964, Executive Order 12898 (regarding Environmental justice), Executive Order 13166 (regarding outreach to populations with Limited English Proficiency), and Executive Order 13330 (regarding the Coordination of Human Services Transportation).

The following identifies the FY 2009 UPWP major planning priorities. Further discussion of these priorities is provided in the various work tasks.

- Continue to address and comply with all federal public participation requirements and with consideration of the State's FOIA Law. Although public involvement has long been a cornerstone of the transportation planning process at HRMPO, the additional SAFETEA-LU requirements challenge the planning process to continue to find innovative and proactive ways of assuring that all citizens, stakeholders, low income and minority neighborhoods, interest groups, and others have a meaningful voice and opportunity to participate in the transportation planning and programming decision-making process. Extensive public involvement activities and special efforts to address Title VI, Environmental Justice and Limited English Proficiency requirements are included under Task 2.1 - Transportation Public Participation.
- An important element of the current UPWP is implementing the Hampton Roads 2030 Long Range Transportation Plan (LRP) and preparing the next update (2034 LRP). The long-range plan focuses on developing a multimodal transportation system and serves as the guide to decision-making for the HRMPO Policy Board. The HRMPO will continue to meet and comply with all federal LRP process requirements including consideration of the eight Planning Factors. Specific LRP and transportation air quality planning activities

are under Tasks 3.1 Maintenance and Use of the 2030 Regional Transportation Models - 3.2 – Development of the Hampton Roads 2034 Long-Range Transportation Plan, and 9.1 – Transportation Air Quality Planning. LRP public participation activities, consultation, and environmental mitigation activities are under Task 2.1 –Transportation Public Participation.

- Under SAFETEA-LU guidelines, the HRMPO TIP is a four-year program that identifies which federally funded projects are programmed to be implemented. The TIP must be consistent with HRMPO's adopted Long-Range Transportation Plan. The TIP must be financially constrained and include only those projects for which construction and operating funds can reasonably be expected to be available. HRMPO's TIP may also include regionally significant non-federally funded projects. The FY 2009-2012 TIP will meet all federal requirements including a Financial Plan. Specific activities are under Task 4.1- Transportation Improvement Program.
- The Congestion Management Process (CMP) is the program where congestion in the multi-modal, regional transportation system is monitored, evaluated and managed. The intent is to protect the region's investments in, and improve the effectiveness of, the existing and future transportation networks. The main goals of the CMP are to reduce congestion/travel time delays, encourage the use of alternative modes of transportation, and improve air quality through the promotion and coordination of congestion mitigation strategies. Safety planning is a critical component of the CMP in Hampton Roads. The CMP is a vital element of the HRMPO planning process and is used as a guide to develop project recommendations for the TIP and the long-range plans. Ongoing application of the CMP is under Task 5.1. Travel Monitoring and Data Collection are under Tasks 1.3 – Virginia Department of Transportation Support, and 8.2 – Regional Travel Time Study. Congestion Mitigation Strategies are included under Tasks 5.2 – Transportation Demand Management and 6.8 – Regional TDM Program (TRAFFIX).
- HRMPO will continue its support of the Regional Transportation Demand Management (TDM) program also known as TRAFFIX. TDM strategies will continue to be used as part of the CMP and specific corridor studies. Work activities are under Tasks 5.1 – Congestion Management Process, 5.2 – Transportation Demand Management, and 6.8 – Regional TDM Program (TRAFFIX).
- HRMPO will continue to be a leader in addressing and implementing management and operations requirements of SAFETEA-LU. Mainstreaming Intelligent Transportation System (ITS) technology and investment decisions in the transportation planning process remains a strong component of the region's planning process. HRMPO will continue to implement and deploy ITS and Operations Management related projects and programs included in the Hampton Roads ITS Strategic Plan. Specific activities are under Task 5.3 – Intelligent Transportation System and Operations Planning.
- The Port of Hampton Roads, third largest seaport on the East Coast, attracts more than 80% of the world's major shipping lines and connects the region with more than 100 nations and over 300 ports of call. The new APM Maersk Terminal, the proposed Craney Island cargo terminal, and the Heartland Corridor project are critical to the success of future freight movement particularly in response to the rapid rise in container imports. HRMPO will continue to consider and incorporate freight as a critical element of the region's transportation planning process. HRMPO will continue to incorporate short-

term and long-term needs and improvements to the transportation system that will promote safe, secure, fast, and efficient movement of goods. Specific activities are under Task 5.4 – Regional Freight Planning.

- The FY 2009 Unified Planning Work Program is reformatted and restructured to include all SAFETEA-LU requirements. All activities and work elements are under Task 1.2 Unified Planning Work Program.

PLANNING FACTORS

Section 450.306(a) of the Final Rule states that the metropolitan 3-C (Continuing, Comprehensive, and Cooperative) process shall provide for consideration and implementation of projects, strategies, and services that will address the following planning factors (PF):

- PF 1 Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
- PF 2 Increase the safety of the transportation system for all motorized and non-motorized users;
- PF 3 Increase the ability of the transportation system to support homeland security and to safeguard the personal security of all motorized and non-motorized users;
- PF 4 Increase accessibility and mobility of people and freight;
- PF 5 Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
- PF 6 Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
- PF 7 Promote efficient system management and operation; and
- PF 8 Emphasize the preservation of the existing transportation system.

Although all of the tasks included in the UPWP address one or more of these planning factors, several tasks (3.2, 5.1, 5.2, 5.3, 5.4, and 6.1) specifically identify the planning factors associated with those tasks.

DEFINITIONS

The following definitions are included to clarify the transportation planning process for Hampton Roads, Virginia.

Metropolitan Planning Organization (MPO)

A Metropolitan Planning Organization (MPO) is planning body required by federal law for urbanized areas with populations of 50,000 or greater. The MPO is a policy board designated by the Governor and, together with the State, is responsible for carrying out the continuing, cooperative, and comprehensive (3-C) metropolitan transportation planning process.

The Hampton Roads MPO (HRMPO) is one of fourteen MPOs in the Commonwealth of Virginia. Voting members of the HRMPO include a representative from each of the cities, counties, and public transit agencies within the metropolitan planning area (MPA), plus the Virginia Department of Transportation (VDOT) and the Hampton Roads Planning District Commission (HRPDC). Representatives from the Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Federal Aviation Administration (FAA), Virginia Department of Aviation (VDOA) and Virginia Port Authority (VPA) are included as non-voting members of the HRMPO. The HRPDC provides staffing for the HRMPO.

Metropolitan Planning Area (MPA)

The Metropolitan Planning Area (MPA) is the geographic area determined by agreement between the MPO for the area and the Governor. The MPA is the area for which the metropolitan transportation planning process is carried out. Metropolitan Hampton Roads is a MPA.

Transportation Management Area (TMA)

A Transportation Management Area (TMA) is an urbanized area with a population over 200,000, as defined by the Bureau of the Census and designated by the Secretary of Transportation, or any additional area where TMA designation is requested by the Governor and the MPO and designated by the Secretary of Transportation. Metropolitan Hampton Roads is a TMA. See Figure 1 for a map of the Hampton Roads TMA.

The Hampton Roads MPA includes:

Cities

Chesapeake
Hampton
Newport News
Norfolk
Poquoson
Portsmouth
Suffolk
Virginia Beach
Williamsburg

Counties

Gloucester*
Isle of Wight
James City
York

Public Transit Agencies

Hampton Roads Transit (HRT)
Williamsburg Area Transport (WAT)

* A portion of Gloucester County is included in the MPA

Hampton Roads Planning District Commission (HRPDC)

The Hampton Roads Planning District Commission (HRPDC) is one of 21 planning district commissions (PDCs) in the Commonwealth of Virginia. PDCs were created in 1969 pursuant to the Virginia Area Development Act and a regionally executed charter agreement. According to Section 15.2-4207 of the Code of Virginia, the purpose of PDCs is “. . . to encourage and facilitate local government cooperation and state-local cooperation in addressing on a regional basis problems of greater than local significance.”

Membership on the PDC is based on population, with each jurisdiction having at least two members. The PDC has an Executive Committee that is made up of one member from each jurisdiction. The Executive Committee provides oversight to the HRPDC's activities through monthly meetings held between the quarterly meetings of the full HRPDC.

The Hampton Roads Planning District includes the following jurisdictions:

Cities

Chesapeake
Franklin
Hampton
Newport News
Norfolk
Poquoson
Portsmouth
Suffolk
Virginia Beach
Williamsburg

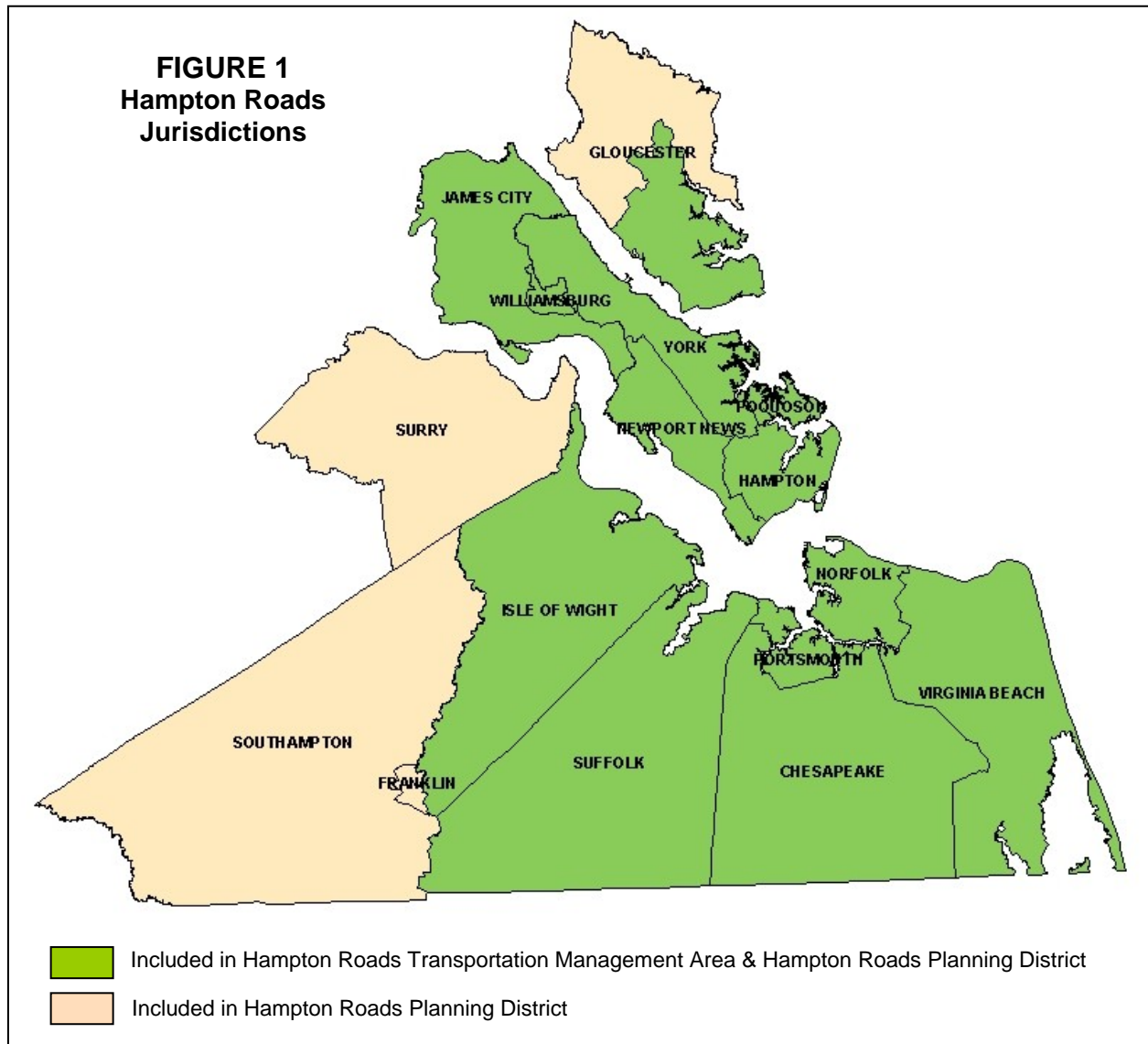
Counties

Gloucester*
Isle of Wight
James City
Southampton
Surry**
York

* Gloucester County is also included in the Middle Peninsula PDC

** Surry County is also included in the Crater PDC

The Executive Director/Secretary, selected by the HRPDC, manages the daily operations of the HRPDC's professional staff. The HRPDC staff serves as a resource of technical expertise to its member jurisdictions on issues pertaining to economics, physical and environmental planning, and transportation. As stated previously, the HRPDC staff also serves as the support staff for the HRMPO and, as such, carries out the technical aspects of the metropolitan transportation planning process. In addition, the HRPDC staff carries out the rural transportation planning process for Southampton County and the City of Franklin. See Figure 1 for a map of the Hampton Roads Planning District.



Transportation Technical Committee (TTC)

The Transportation Technical Committee (TTC) is composed of transportation engineers and planners from each of the local jurisdictions, plus representatives from the transit agencies and VDOT. Each of these entities has up to three voting members on the TTC. The TTC reviews virtually all items that are to come before the MPO and provides recommendations on actions to be considered by the MPO.

In addition to the voting membership discussed above, there are a number of invited participants on the TTC mailing list, including representatives from private bus services, taxi companies, the ports, and freight haulers, as well as organizations that provide services to senior citizens and those with disabilities. Other non-voting members on the TTC include

representatives from the Virginia Department of Environmental Quality (DEQ), Virginia Department of Rail and Public Transportation (VDRPT), FHWA, FTA, and the Navy.

Metropolitan Transportation Plan (LRP)

The metropolitan transportation plan, also called the long-range transportation plan (LRP), is the official multimodal transportation plan addressing a planning horizon of at least 20 years. Any transportation project that is regionally significant and/or utilizes federal funding must be included in the LRP. In addition, the LRP must be financially constrained – meaning it must be shown that there will be sufficient funds to complete the projects included in the plan.

The LRP is developed, adopted, and updated by the MPO through a multi-step process that takes several years to complete. The LRP must be updated at least every four years.

Transportation Improvement Program (TIP)

The Transportation Improvement Program (TIP) is a short-range fiscal programming document that covers a period of no less than four years. The TIP must be updated at least every four years, but is usually updated annually. The cycle for updating the TIP must be compatible with the State TIP (STIP) development and approval process. Projects that are included in the TIP must be selected from or be consistent with an approved LRP.

Air Quality Conformity Analysis (Conformity)

Conformity is a requirement of the Clean Air Act that ensures that federal funding and approval are given to transportation plans, programs, and projects that are consistent with the air quality goals established by the State Implementation Plan (SIP). Before the LRP and TIP can receive final approval, they must be tested for conformity. With respect to the SIP, conformity means that transportation activities will not cause new air quality violations or delay timely attainment of the National Ambient Air Quality Standards (NAAQS).

FREQUENTLY USED ABBREVIATIONS

5303	Section 5303 (Transit) Planning Funds
5307	Section 5307 (Transit) Capital/Operating Funds
AA	Alternatives Analysis
ACS	American Community Survey
BRT	Bus Rapid Transit
CMAQ	Congestion Mitigation and Air Quality Program
CMP	Congestion Management Process
COE	U.S. Army Corps of Engineers
COMPARE	Congestion Management Plan: A Regional Effort
CTB	Commonwealth Transportation Board
CTPP	Census Transportation Planning Package
DBE	Disadvantaged Business Enterprise
DEIS	Draft Environmental Impact Statement
EJ	Environmental Justice
EMS	Environmental Management System
EPA	Environmental Protection Agency
ETC	Employee Transportation Coordinator
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
FY	Fiscal Year (July 1 – June 30)
FFY	Federal Fiscal Year (October 1 – September 30)
GIS	Geographic Information System
HOV	High-Occupancy Vehicle
HRHIM	Hampton Roads Incident Management Committee
HRMPO	Hampton Roads Metropolitan Planning Organization
HRPDC	Hampton Roads Planning District Commission
HRT	Hampton Roads Transit
ISTEA	Intermodal Surface Transportation Efficiency Act (1991)
ITS	Intelligent Transportation System
ITSOP	Intelligent Transportation System and Operations Planning Committee
JARC	Job Access and Reverse Commute Program
LRP	Long Range Transportation Plan
LRT	Light Rail Transit
MBE	Minority-owned Business Enterprise
MPA	Metropolitan Planning Area
MPO	Metropolitan Planning Organization
MSA	Metropolitan Statistical Area
NAAQS	National Ambient Air Quality Standards

NEPA	National Environmental Policy Act
NHS	National Highway System
NHTS	National Household Travel Survey
PL	Planning Funds (FHWA)
RCTO	Regional Concept of Transportation Operations
RSTP	Regional Surface Transportation Program
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (2005)
SPR	State Planning and Research Funds
TAZ	Transportation Analysis Zone
TDCHR	Transportation District Commission of Hampton Roads
TDM	Transportation Demand Management
TEA-21	Transportation Equity Act for the 21 st Century (1998)
TIP	Transportation Improvement Program
TPP	Transportation Participation Plan
TTC	Transportation Technical Committee
UPWP	Unified Planning Work Program
USDOT	United States Department of Transportation
VDEM	Virginia Department of Emergency Management
VDEQ	Virginia Department of Environmental Quality
VDOA	Virginia Department of Aviation
VDOT	Virginia Department of Transportation
VDRPT	Virginia Department of Rail and Public Transportation
VFAC	Virginia Freight Advisory Committee
VGIN	Virginia Geographic Information Network
VPA	Virginia Port Authority
VTRANS2025	Virginia Statewide Multimodal Transportation Plan
WAT	Williamsburg Area Transport
WBE	Woman-owned Business Enterprise

FREQUENTLY USED TERMS

Allocations	The distribution by the CTB of federal and state transportation funds to the projects contained in the SYIP.
Attainment	A term that means an area is in compliance with the National Ambient Air Quality Standards (NAAQS) and/or the Clean Air Act (CAA). If an area has been a Nonattainment Area for a particular pollutant and then achieves Attainment, it is usually classified as a Maintenance Area for that pollutant. There are six atmospheric pollutants covered under the CAA. The Hampton Roads area is currently designated as a maintenance area for ozone, the only pollutant for which the region has been in nonattainment in the past.
CMAQ	Congestion Mitigation and Air Quality program - federal funding program created under ISTEA (1991) and continued through the current federal transportation act, SAFETEA-LU. The program directs funds to projects that contribute to meeting the National Ambient Air Quality Standards. CMAQ funds generally may not be used for projects that result in the construction of new highway capacity for single occupant vehicles. CMAQ funds may be available for eligible planning activities that lead to and result in project implementation.
Local Match	Funds required by recipients of PL and Section 5303 funds for matching federal and state grant funds. Section 5303 and PL funds require a 10 percent local match, plus a 10 percent state match (provided by VDOT or VDRPT) in order to match the remaining 80 percent provided by the federal source.
NOx	Nitrogen Oxides – ground level ozone is produced by a chemical reaction between NOx and Volatile Organic Compounds in the presence of sunlight.
Obligations	Commitments made by USDOT agencies to pay out money for federal-aid transportation projects. The TIP serves as the MPO's program of transportation projects for which federal funds have been obligated.
PL	Planning funds available from FHWA for MPO program activities.
Regionally Significant	Term used for Air Quality Conformity Analysis to define highway and rail facilities that must be included in the analysis. Regionally significant projects are those projects on a facility that serves regional transportation needs and would normally be included in the modeling of the transportation network for the MPA. This includes, as a minimum, all principal arterial highways and all fixed guide-way transit facilities that offer a significant alternative to regional highway travel.
Section 5303	Planning funds available from the FTA for MPO program activities.

SIP	State Implementation Plan - Identifies control measures and processes for achieving and maintaining the NAAQS.
SPR	State Planning and Research - federal funds allocated to VDOT in support of regional transportation planning activities.
Study Area	Also known as the Metropolitan Planning Area (MPA), this is the area projected to become urbanized within the next 20 years. The MPA defines the area for MPO plans, programs, and studies.
SYIP	Six Year Improvement Program - an annual document approved by the CTB that provides the state's list of federal and state funded transportation projects and programs administered by VDOT and VDRPT.
"3-C" Process	Refers to the Continuing, Cooperative and Comprehensive language from the federal legislation that established MPOs; used in reference to the regional transportation planning and programming process.
TCM	Transportation Control Measures used to improve air quality.
TDM	Transportation Demand Management; various transportation control strategies and measures used in managing highway demand.
TAZ	Transportation Analysis Zone - Generally defined as areas of homogeneous activity served by one or two major highways. TAZs serve as the base unit for socioeconomic data characteristics used in various plans, models, and studies.
Urbanized Area	Term used by the U.S. Census Bureau to designate urban areas. These areas generally contain population densities of at least 1,000 persons per square mile in a continuously built-up area of at least 50,000 persons. Factors such as commercial and industrial development, and other types and forms of urban activity centers are also considered.
UPWP	Unified Planning Work Program – the program of work for the MPO noting planning priorities, activities and tasks, assigned staffs, work products, budgets, and funding sources.
VOC	Volatile Organic Compounds – ground level ozone is produced by a chemical reaction between VOCs and nitrogen oxides (NOx) in the presence of sunlight.

MPO STANDING COMMITTEES

TTC Transportation Technical Committee

The Transportation Technical Committee (TTC) is composed of transportation engineers and planners from each of the local jurisdictions, plus representatives from the transit agencies and VDOT. Each of these entities has up to three voting members on the TTC. The TTC reviews virtually all items that are to come before the MPO and provides recommendations on actions to be considered by the MPO.

In addition to the voting membership discussed above, there are a number of invited participants on the TTC mailing list, including representatives from private bus services, taxi companies, the ports, and freight haulers, as well as organizations that provide services to senior citizens and those with disabilities. Other non-voting members on the TTC include representatives from the Virginia Department of Environmental Quality (DEQ), Virginia Department of Rail and Public Transportation (VDRPT), FHWA, FTA, and the Navy.

From time to time the TTC may request that the Transportation Technical Subcommittee (TTS) take up a topic that requires more in-depth discussion than is feasible with the full TTC. The TTS is a subset of the TTC, made up of one representative from locality, each transit agency, and VDOT. After the TTS completes its work, it reports back to the full TTC.

ITSOP Intelligent Transportation System and Operations Planning Committee

The ITS and Operations Planning Committee membership consists of stakeholders from various public and private agencies, including:

- Traffic engineers and traffic operations staff from all twelve localities
- Incident management stakeholders, including first responders, local law enforcement, fire, Virginia state police, and towing agencies
- VDOT – staff from traffic engineering, planning, environmental/hazardous materials (HAZMAT), and the Transportation Management Center (TMC)
- The Department of the Navy – staff handling traffic and operations
- Virginia Port Authority and other freight stakeholders
- FHWA
- MPO staff
- Private consultants
- Old Dominion University – CEE/Transportation

The MPO's vision for the region includes the establishment of a multi-jurisdictional transportation system unified by ITS technologies. Over the long-term, this progressive vision includes full-scale communications through TMCs in every city and county that will tie into the existing Regional TMC.

1.0 MAINTENANCE OF THE MPO ADMINISTRATIVE PROCESSES

1.1 Metropolitan Planning Organization (MPO) Administration

A. Background

This task provides the administrative support necessary for the maintenance of the Metropolitan Planning Organization (MPO) processes.

Under the *Intermodal Surface Transportation Efficiency Act (ISTEA)* of 1991, the planning and programming responsibilities of the MPO were significantly increased – becoming broader and more comprehensive. Most of the new requirements were continued in the *Transportation Equity Act for the 21st Century (TEA-21)*, signed into law on June 9, 1998.

The current federal transportation act, the *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)*, was signed into law on August 10, 2005. While SAFETEA-LU retained and revised the metropolitan and statewide transportation planning statutory requirements that were included in the previous two Acts, some key statutory requirements were added. It should be noted that many of the provisions included in SAFETEA-LU required rulemaking to allow for implementation. Draft regulations implementing MPO planning and programming provisions under SAFETEA-LU were published in the Federal Register on June 9, 2006. The final regulations (Final Rule) were published on February 14, 2007.

SAFETEA-LU, like the previous federal transportation acts, charges the MPO with developing transportation plans and programs that provide for transportation facilities and services that function as an intermodal system. The process for developing these plans and programs is commonly referred to as the 3-C Process. The 3-C Process requires that a Continuing and Comprehensive transportation planning process be carried out Cooperatively by states and local governments.

B. Work Elements

Work activities include the following:

1. Preparation of agendas and minutes for Transportation Technical Committee (TTC) and MPO meetings, as well as for subcommittees of those groups.
2. Administration of PL, SPR, and Section 5303 grants.
3. Administration of pass-through agreements with HRT and WAT.
4. Participation on advisory committees, as appropriate.
5. Preparation of quarterly and annual financial reports and summaries of progress during the fiscal year.

6. Provision of interagency coordination and attending meetings of local governments, local transit operators, and state transportation departments, as well as other agencies, as appropriate.
7. Preparation of intergovernmental reviews, as necessary.
8. Coordination with VDOT to establish procedural guidance for verifying the process and implementation of self-certification with respect to Title VI of the Civil Rights Act of 1964 and the Americans with Disabilities Act.

C. End Products

1. Agendas and minutes for monthly TTC and MPO meetings.
2. Agendas for subcommittee meetings, as needed.
3. Processed and signed PL, Section 5303, SPR, and pass-through agreements.
4. Quarterly and annual financial and progress reports delivered to VDOT.
5. Final guidance report on Work Element 8 to be submitted to the federal team.

D. Schedule

1. TTC and MPO agendas are prepared on a monthly basis.
2. Grant and pass-through agreements are generally processed one to two months prior to the beginning of the next fiscal year.
3. Financial and progress reports are produced on a quarterly, as well as annual basis.
4. The final guidance report produced under Work Element 8 will be submitted to the federal team by August 2008.

E. Participants

HRMPO, local governments, HRT, WAT, VDOT, VDRPT, FHWA, FTA, other state and federal agencies.

F. Budget, Staff, Funding

	PL	5303	CO 5303	TOTAL
HRMPO	\$345,939	\$77,862		\$423,801

1.2 Unified Planning Work Program (UPWP)

A. Background

The Unified Planning Work Program (UPWP) is developed each year by the MPO, in cooperation with VDOT, VDRPT, HRT, and WAT, to document the work proposed to be done by the MPO over the next one or two year period. This task provides for the preparation and maintenance of the UPWP.

B. Work Elements

Work activities include the following:

1. Review VDOT, VDRPT, FHWA, FTA, EPA, and other state and federal agency information and requirements, in addition to other materials related to UPWP preparation.
2. Solicit input for proposed work tasks via the TTC as well as public involvement opportunities throughout the year.
3. Solicit input from the local governments, HRT, WAT, VDOT, and VDRPT on proposed transportation planning studies of interest to the MPO. Includes studies programmed in the Transportation Improvement Program (TIP).
4. Identify and document planning priorities.
5. Prepare work tasks and budgets.
6. Identify funding sources and amounts.
7. Prepare final UPWP document.
8. Secure necessary approvals from the MPO, VDOT, VDRPT, FHWA, FTA, and other agencies/organizations as appropriate.
9. Secure commitments for local match funds as appropriate.
10. Post the final UPWP document on the HRPDC website.
11. Amend the adopted UPWP per MPO actions.
12. Prepare and update staff work assignments, direct costs, and schedules.

C. End Products

1. Prepare and process amendments, as necessary, to the approved FY 2009 UPWP.
2. Produce the FY 2010 UPWP document.

D. Schedule

1. Maintenance of the current year UPWP is an on-going activity.
2. March 2009 for final MPO approval of the FY-2010 UPWP document.

E. Participants

MPO, local governments, HRT, WAT, VDOT, VDRPT, FHWA, FTA, other members of the TTC

F. Budget, Staff, Funding

	PL	5303	TOTAL
HRMPO	\$50,000	\$25,000	\$75,000

1.3 Virginia Department of Transportation (VDOT) Support

A. Background

The Transportation and Mobility Planning division (TMPD) is responsible for ensuring the development of long range transportation plans across the Commonwealth that promote a safe, efficient and effective transportation system. TMPD's planning focus is at the statewide level, addressing the accessibility and mobility needs of people and freight on the interstate and primary highway systems. However with TMPD support VDOT's Hampton Roads District Planning Office is responsible for: maintaining the federal metropolitan planning process, conducting small urban area transportation studies, as well as conducting corridor level planning studies that support the project development process. The Hampton Roads District Planning section carries out the charge of maintaining the federal metropolitan process through the review of and assistance with the development and execution of related work elements in the MPO's UPWP. Those specific tasks required are noted in the following work elements.

B. Work Elements

1. Thoroughfare System Monitoring and Review

Maintain Highway Inventory; Provide Traffic Data; Check Highway Construction Plans for Conformance with Approved Thoroughfare Plan; Intergovernmental Review Process; Site Plan Reviews; Review Transportation Studies.

Develop and maintain a current inventory of the existing thoroughfare system. Provide traffic data for input to the transportation plan update process, corridor studies, highway projects and environmental impact studies. Review and comment relative to the conformance of highway construction plans with current transportation plan. Process Notices of Intent and Applications as required by the Intergovernmental Review Process. Address transportation impacts associated with site plan proposals. Review transportation studies and other documents developed as part of the transportation planning process.

2. Vehicle Occupancy Counts Conducted at Selected Locations on the Major Highway Facilities Throughout the Region

These vehicle occupancy counts will provide a measure of the results the regional ride-sharing efforts are having on vehicle occupancy and help in planning HOV programs. Occupancy counts will be provided at various locations at different times to be used for auto occupancy factors to adjust the person trips in the long range planning process throughout the Hampton Roads Region as requested annually.

3. Monitor HOV Facilities and/or Congestion on the Virginia Beach-Norfolk Expressway (I-264) and I-64

Several data items will be collected to evaluate and monitor the HOV lanes on I-264 and I-64 for effectiveness. Since the HOV restrictions have returned on I-

264, and the new HOV lanes have opened on I-64, this activity involves the following:

- Hold meetings of the TRAFFIX / HOV Steering Committee.
- Conduct vehicle occupancy counts on I-264 and I-64, four locations on the Peninsula and eight locations on the Southside.
- Conduct travel time and delay runs on I-264 and I-64, Southside and Peninsula.
- Prepare reports containing comparative data items

4. Provide assistance to Hampton Roads MPO, local jurisdictions, and other agencies, via technical support and coordination, concerning transportation, including bicycle and pedestrian issues to support the MPO process.

- Monthly coordination meetings with local jurisdictions
- Hold quarterly Hampton Roads District bicycle and Pedestrian Advisory committee meetings
- Prepare reports and present reports regarding VDOT sponsored transportation activities as requested.

5. Provide Review, Assistance, Support or Processing of :

- MPO Quarterly and Annual Financial Reports
- Congestion Management Process
- Intermodal / Freight Planning activities
- Project level planning, environmental and alternatives assessment
- Long Range Planning process
- Transportation Improvement Program
- Transportation Air Quality and Planning activities
- Transportation Database management activities
- Transit Planning Activities
- Public participation program, including Title VI and
- Preparation of Annual Progress Report

C. End Product

Effective and Efficient Hampton Roads MPO process that is fully certifiable by FHWA and FTA according the federal regulations as outlined in SAFETEA-LU.

D. Schedule

On-going Activity

E. Participants

HRMPO, VDOT, VDRPT, HRT, WAT, FHWA, and local governments

F. Budget, Staff, Funding

	SPR	SPR-SW	TOTAL
VDOT	\$410,000	\$500,000	\$910,000

2.0 PUBLIC PARTICIPATION

2.1 Transportation Public Participation

A. Background

The HRMPO believes that public involvement is a critical element in the regional transportation planning process. The importance of public involvement in the transportation planning and programming process was recognized in federal law in the *Intermodal Surface Transportation Efficiency Act (ISTEA)* of 1991 and continues to be recognized in the current federal transportation act, the *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)*. SAFETEA-LU requires a high level of public involvement in the MPO processes, especially with regard to the Long Range Transportation Plan (LRP) and the Transportation Improvement Program (TIP).

The first HRMPO public involvement document was adopted on September 14, 1994, to address public participation requirements included in ISTEA. On October 15, 2003, the HRMPO published a report that documented a full review and update of its public involvement procedures in an effort to insure that the public was provided ample opportunities to participate in the metropolitan transportation planning and programming processes in Hampton Roads and that the procedures are in compliance with the requirements of Title VI of the Civil Rights Act and Executive Order 12898 on Environmental Justice. The updated public involvement procedures document contained goals and objectives of the MPO for public involvement and described outreach activities and evaluation techniques to be used in carrying out the public involvement efforts of the MPO. On July 18, 2007, the MPO adopted the current participation plan, entitled *Hampton Roads Transportation Participation Plan*. During FY 2009, MPO staff will develop a Title VI Plan and revise the participation plan to strengthen it with regard to reaching and engaging traditionally underserved communities and households in the transportation planning process.

B. Work Elements

Work activities include the following:

1. Coordination with HRT, WAT, VDOT, and VDRPT to cooperatively reevaluate the effectiveness, openness, and fullness of the HRMPO's transportation planning and programming process as it pertains to the intent of federal public participation requirements, and in consideration of Virginia's Freedom of Information Act (FOIA).
2. Coordination with HRT, WAT, VDOT, and VDRPT to update the participation plan to clearly describe the explicit procedures, strategies, and desired outcomes for seeking out and considering the needs of those traditionally underserved by existing transportation systems, such as low income and minority households, who may face challenges accessing employment and other services.

3. Coordination with HRT and WAT to establish procedures for applying Environmental Justice (EJ), develop measures to test the achievement of EJ, assess both highway and transit investments, and undertake outreach activities to low-income and minority communities to solicit input. This includes the completion of the four factor analysis associated with Limited English Proficiency (LEP).
4. Coordination with HRT, WAT, and VDOT to develop a Title VI Plan for the Hampton Roads MPO.
5. Administration of the participation plan activities related to the Long Range Transportation Plan (LRP), the Transportation Improvement Program (TIP), and the Air Quality Conformity Analysis.
6. Participation in public meetings and hearings held by the HRMPO, plus those held by local and state governments and the local transit agencies, as appropriate.
7. Carrying out all activities included in the *Hampton Roads Transportation Participation Plan*.
8. Enhanced communications with the public regarding regional public transportation issues and specific TDCHR activities, including the Norfolk Light Rail Transit (LRT) project.
9. Ensuring the coordination of information dissemination to the general public and local agencies regarding regional public transit.
10. Developing and implementing a communications process and public involvement techniques to provide information regarding public transit to the public on an ongoing basis.
11. Developing opportunities to inform the public on HRT and public transportation initiatives and projects by coordinating a speaker's bureau and by participating in community events.
12. Creating and maintaining a database to facilitate the public involvement and information process with regard to public transportation.
13. Responding to information requests from the general public.
14. Providing training for HRT public information staff to build, enhance, and broaden public involvement techniques.

C. End Products

1. For Work Element (WE) 1 – Evaluation report to be submitted to FHWA and FTA.
2. For WE 2 – Revision of participation plan document.

3. For WE 3 – Report to be submitted to FHWA and FTA.
4. For WE 4 – Title VI Plan for Hampton Roads MPO.
5. For WE 8-14 – Annual report and other public communications materials, a computer database, and educational programs to be produced by HRT/TDCHR.

D. Schedule

1. For WE 1 – Report to be submitted by August 2008.
2. For WE 2 – During FY 2009.
3. For WE 3 – Report to be submitted by March 2009.
4. For WE 4 – Report to be submitted by March 2009.
5. For WE 5–7 – Ongoing activities.
6. For WE 8-14 – Ongoing activities of HRT

E. Participants

HRMPO, HRT, WAT, VDOT, VDRPT, FHWA, FTA, local governments, general public.

F. Budget, Staff, Funding

	PL	5307	TOTAL
HRMPO	\$300,000		\$300,000
HRT		\$75,000	\$ 75,000
TOTAL	\$300,000	\$75,000	\$375,000

3.0 LONG-RANGE TRANSPORTATION PLANNING

3.1 Maintenance and Use of 2030 Regional Transportation Model

A. Background

The Hampton Roads 2030 Long-Range Transportation Plan (LRP) was approved by the MPO on October 17, 2007, and found to be in conformity with air quality requirements by the USDOT on January 22, 2008. Consequently, the 2030 regional four-step transportation model, which contains the 2030 LRP projects, is now available for use.

B. Work Elements

Work activities include the following:

1. VDOT will maintain the model and all associated input files and will act as the clearinghouse for all private sector requests for, or assistance in, utilizing the model.
2. Upon request by VDOT, MPO staff will provide network modeling technical assistance to local consultants.
3. Upon request from local jurisdictions and transit agencies, MPO staff will use the 2030 model in conducting transportation analyses and providing input to local studies by others.

C. End Products

Each use of the model (and any resulting analysis) requested by local jurisdictions and transit agencies will be documented.

D. Schedule

VDOT will maintain the model throughout the fiscal year. MPO staff will provide technical assistance, conduct transportation analyses, and provide input to local studies on an as-needed basis.

E. Participants

VDOT, MPO, local governments, and local transit agencies.

F. Budget, Staff, Funding

	PL	TOTAL
HRMPO	\$24,000	\$24,000

3.2 Development of 2034 Long-Range Transportation Plan (LRP)

A. Background

The life of a metropolitan long-range transportation plan (LRP) is limited to four (4) years by federal regulation. The Hampton Roads MPO staff conducts a continuous process of developing long-range transportation plans. Typically, when one LRP is completed, work on the next LRP begins. In the case of the 2034 LRP, while the 2030 LRP was completed in FY08, work began in FY07. In FY07, the MPO staff forecasted 2034 socio-economic data totals (e.g. population, employment) by locality which were approved by the MPO on June 20, 2007. In FY08, the MPO staff oversaw the process whereby localities disaggregate these control totals into 2034 forecasts by transportation analysis zones (TAZs). As currently scheduled, in FY08 the 2034 TAZ data and committed projects (i.e. those projects included for construction in VDOT's six-year improvement program) will be placed into the region's four-step transportation model, and the model will be run to forecast 2034 congestion by thoroughfare segment. This congestion forecast will serve as a guide for the formulation of projects to be tested as candidates for the 2034 LRP. The FY09 work shown herein will build on the FY07 and FY08 work already completed for the 2034 LRP.

B. Work Elements

Work activities include the following:

1. MPO staff will solicit candidate 2034 projects from each locality, VDOT, transit, and MPO staffs. MPO staff will promote the consideration of the eight (8) federal planning factors (PF) in the identification of candidate 2034 projects, as follows:
 - PF 1 Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
 - PF 2 Increase the safety of the transportation system for all motorized and non-motorized users;
 - PF 3 Increase the ability of the transportation system to support homeland security and to safeguard the personal security of all motorized and non-motorized users;
 - PF 4 Increase accessibility and mobility of people and freight;
 - PF 5 Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
 - PF 6 Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
 - PF 7 Promote efficient system management and operation; and

PF 8 Emphasize the preservation of the existing transportation system.

2. MPO staff will coordinate the process of gathering the cost of candidate 2034 projects from VDOT and transit agencies.
3. HRT and WAT will estimate the cost of candidate 2034 transit projects. VDOT will estimate the cost of candidate 2034 highway projects.
4. MPO staff will calculate the expected effectiveness of each candidate 2034 project, selecting measures of effectiveness which reflect the eight (8) federal planning factors (above).
5. MPO staff will update the MPO inventory of bicycle and pedestrian facilities in the region.
6. MPO staff will actively participate in the VDOT Hampton Roads District's Pedestrian and Bicycle Advisory Committee and assist the committee with its update of the District's bicycle plan as needed.

C. End Products

1. List of candidate 2034 projects with project description.
2. List of candidate 2034 projects with project cost.
3. Tables and slides showing measures of effectiveness of candidate 2034 projects.
4. Inventory of existing bicycle facilities in the region.
5. Identification of gaps in the region's bicycle network.

D. Schedule

1. List of candidate 2034 projects with project description: 2nd Quarter FY 2009
2. List of candidate 2034 projects with project cost: 3rd Quarter FY 2009
3. Tables and slides showing measures of effectiveness of candidate 2034 projects: June 2009
4. Inventory of existing bicycle facilities in the region: continually updated.
5. Identification of gaps in the region's bicycle network: 2nd Quarter FY 2009.

E. Participants

VDOT, MPO, local governments, and local transit agencies.

F. Budget, Staff, Funding

	PL	TOTAL
HRMPO	\$340,000	\$340,000

4.0 TRANSPORTATION PROJECT PROGRAMMING

4.1 Transportation Improvement Program (TIP)

A. Background

The Transportation Improvement Program (TIP) is a multi-year program for the implementation of transportation improvement projects within the Hampton Roads metropolitan planning area (MPA). The TIP must contain all regionally significant projects that require action by FHWA or FTA. Projects included in the TIP must be consistent with the approved Long-Range Transportation Plan.

As required by the current federal transportation act, entitled the *Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users* (SAFETEA-LU), the TIP is developed by the MPO in cooperation with the State and affected public transportation operators. SAFETEA-LU requires that the TIP cover a period of no less than four years and be updated at least every four years. The MPO is required to provide all interested parties with a reasonable opportunity to comment on the proposed TIP, as well as any subsequent amendments to the TIP.

Included in this task is the work associated with the Congestion Mitigation and Air Quality (CMAQ) program and Regional Surface Transportation Program (RSTP) Project Selection Process. The CMAQ and RSTP Project Selection Process is a cooperative effort involving the MPO, local governments, local transit agencies, VDOT, and VDRPT, to prioritize and select projects received CMAQ or RSTP funding.

B. Work Elements

Work activities include the following:

1. In cooperation with VDOT, VDRPT, HRT, WAT, and the local governments, develop a draft list of projects to be included in the FY 2009-2012 TIP.
2. Coordinate the public review of the draft project list prior to commencement of the Air Quality Conformity Analysis on the draft project list.
3. Work with VDOT and VDRPT on the development of the financial plan for the FY 2009-2012 TIP.
4. Coordinate the public review of the draft FY 2009-2012 TIP prior to final approval by the MPO.
5. Maintain and update the FY 2006-2009 TIP until the FY 2009-2012 TIP has been adopted.
6. Maintain and update the FY 2009-2012 TIP after it has been adopted.
7. Conduct public reviews of proposed amendments to the current TIP.

8. Maintain a current version of the TIP on the HRPDC website to provide easy public access.
9. Coordinate the Project Selection Process for CMAQ and RSTP projects, as necessary.
10. Monitor and update Project Selection Process methodologies as deemed necessary.
11. Maintain electronic spreadsheets to keep track of CMAQ and RSTP allocations and transfers.

C. End Products

1. A financially-constrained FY 2009-2012 TIP that passes the Air Quality Conformity Analysis.
2. A report on the CMAQ and RSTP projects selected during the Project Selection Process, as needed.

D. Schedule

The FY 2009-2012 TIP is scheduled to be completed by Fall 2008.

If the TTC decides to conduct a CMAQ and RSTP Project Selection Process session during FY 2009, a summary report will be produced.

E. Participants

HRMPO, local governments, HRT, WAT, VDOT, VDRPT, FHWA, FTA, other state and federal agencies, the general public.

F. Budget, Staff, Funding

	PL	5303	TOTAL
HRMPO	\$70,000	\$65,000	\$125,000

5.0 MANAGEMENT SYSTEMS

5.1 Congestion Management Process (CMP)

A. Background

The Hampton Roads MPO (HRMPO) took action in October 1995 to adopt the region's Congestion Management System (CMS) and Implementation. The CMS (changed to CMP under SAFETEA-LU) provides a systematic process for addressing congestion by providing information on transportation system performance and alternative transportation strategies. It represents the essential link between long-range plans and project implementation. The CMP activities have become an on-going part of the MPO's transportation planning process. The HRMPO will continue to oversee the interagency coordination necessary to develop and establish a systematic process for providing information on transportation system performance and alternative strategies to alleviate congestion and enhance the mobility of persons and goods.

In FY 2008, the HRMPO staff initiated the Regional Delay Study. This study includes an analysis of vehicular delay throughout Hampton Roads by comparing 2005 travel time data with previous regional travel time data. Current delay and safety on the region's freeway system are also analyzed and reported as part of this study. In addition, HRMPO staff also released an update to the Hampton Roads Regional Safety Study: General Crash Data and Trends report. This report included crash data and trends on a jurisdictional and regional level. Comparisons with national, statewide, and other metropolitan areas were also included.

The HRMPO staff also initiated the update of the CMP report in FY 2008. The regional CMP network was updated with new roadways and roadway characteristics. Portions of the congestion analysis for the CMP network were also completed.

Based on VDOT's 2005 proposal to use the Rural Transportation Planning Assistance Program to achieve regional long-range planning for rural areas of each PDC, the HRMPO staff will continue to coordinate with the HRPDC staff as it continues the process of including its rural localities in the Congestion Management Process.

B. Work Elements

The HRMPO staff will promote and integrate the following federal planning factors (PF) into the regional CMP program:

- PF 2 Increase the safety of the transportation system for all motorized and non-motorized users;
- PF 4 Increase accessibility and mobility of people and freight;
- PF 5 Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between

transportation improvements and State and local planned growth and economic development patterns;

PF 6 Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;

PF 7 Promote efficient system management and operation; and

PF 8 Emphasize the preservation of the existing transportation system.

In 2009, the Congestion Management Process (CMP) task will include the following major work elements:

1. Complete the update of the 2008 CMP report with a detailed congestion analysis of the CMP network for existing and near term traffic conditions during the morning and afternoon peak hours. This task also includes a detailed analysis of the major tunnels and bridges in the region.
2. Reviewing current congestion mitigation measures, developing additional strategies and analyzing their impacts in managing congestion and improving safety and quality of life in the region. These measures include but are not limited to transportation demand management, HOV and value pricing options, traffic management and operations, ITS and application of technologies to the roadway network, and roadway capacity improvements.
3. Identifying the worst congested corridors/areas for more specific and detailed traffic and travel analysis. Initiate corridor studies.
4. Release the HR Regional Delay Study.
5. Release an update to the State of Transportation report, which was last updated in January 2007. Data, both existing and historical, on all facets of the region's multimodal transportation system will be included in the report, including rail, water, air, and highways. Comparisons with national, statewide, and other metropolitan areas will also be included in the report.
6. Continue to collect and update the CMP database with the most current traffic counts, roadway characteristics, and crash data.
7. Collect transportation data and perform historical and trend analysis relating to highways, transit, rail, bike/pedestrian, air, and water travel.
8. Review and analyze the data and results published in the Texas Transportation Institute (TTI) Annual Mobility Report.
9. Compare Hampton Roads with large metropolitan areas across the country in terms of Vehicle Miles of Travel, lane-miles and cost of congestion.
10. Monitor current congestion mitigation strategies including, but not limited to, the TRAFFIX program, implementation of telecommuting projects, HOV system usage, freeway and arterial traffic management & operations, signal systems, other ITS related projects, and roadway capacity improvements.

C. End Products

1. The State of Transportation Report
2. Regional Delay Study
3. Existing and Future Year Congestion Analysis of the CMP Transportation Network
4. Congestion Mitigation Toolbox
5. CMP Database Network (Excel Format)
6. Other Transportation Databases (safety, transit, air travel, bridges & tunnels) Excel Format
7. Regional Traffic Volumes for Public Distribution (PDF Format)
8. Analysis of TTI Annual Mobility Report
9. PowerPoint presentation slides of items 1, 2, 3, 4, and 8

D. Schedule

1. First Quarter FY 2009 – Regional Delay Study
2. Second Quarter FY 2009 – Congestion Analysis
3. Third Quarter FY 2009 – State of Transportation Report and Traffic Volumes for Public Distribution
4. Fourth Quarter FY 2009 – Congestion Mitigation Toolbox
5. On-going Activities – CMP and Other Transportation Databases

E. Participants

HRMPO, VDOT, Localities, Local transit agencies (HRT, WAT), TRAFFIX, VDRPT, FHWA

F. Budget, Staff, Funding

	PL	TOTAL
HRMPO	\$120,000	\$120,000

5.2 Transportation Demand Management (TDM)

A. Background

The Transportation Demand Management (TDM) program for Southeastern Virginia (TRAFFIX) is a coordinated regional approach aimed at managing demand on the region's transportation infrastructure through transportation alternatives. The primary goals of the TRAFFIX program are to reduce congestion, improve air quality and enhance personal mobility by implementing a series of TDM strategies including rideshare matching, carpooling/vanpooling, commuter/express buses, and promotion of high occupancy vehicle lanes.

This work task is to continue with the development of a Transportation Demand Management Plan for Hampton Roads to meet the requirements of the federal SAFETEA-LU legislation.

B. Work Elements

The HRMPO staff will promote and integrate the following federal planning factors (PF) into the regional TDM program:

- PF 4 Increase accessibility and mobility of people and freight;
- PF 5 Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
- PF 6 Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;

The primary tasks will be:

- 3. Analyze TDM related data and evaluate existing and potential strategies as part of the regional congestion management plan (CMP) and related corridor and sub-area studies.
- 4. Participate and provide technical assistance to TRAFFIX staff. The Transportation District Commission of Hampton Roads administers the TRAFFIX program.
- 5. Work closely with the Traffix Oversight Committee members to plan and implement TDM measures and alternative modes of transportation in Hampton Roads.

C. End Products

Regional TDM Strategies will be included in the CMP Congestion Mitigation Toolbox

D. Schedule

On-Going Activity

E. Participants

HRMPO, VDOT, TRAFFIX, Localities, Local transit agencies (HRT, WAT), VDRPT, FHWA

F. Budget, Staff, Funding

	PL	5303	TOTAL
HRMPO	\$5,000	\$5,000	\$10,000

5.3 Intelligent Transportation System and Operations Planning

A. Background

With the emergence of Intelligent Transportation Systems (ITS) and the pressing need to minimize congestion and reduce delays, the Hampton Roads ITS Committee initiated a project called COMPARE (Congestion Management Plan: A Regional Effort), which was completed in FY1996. In 2000, COMPARE was updated to produce the ITS Strategic Plan for Hampton Roads. In 2004, the ITS and Operations Planning (ITSOP) Committee updated the ITS Strategic Plan document. This strategic plan will be the foundation for future ITS projects ensuring that the area continues to benefit from emerging technologies.

The federal SAFETEA-LU legislation requires statewide and regional transportation plans to consider “Operational and management strategies to improve the performance of existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility of people and goods.” In 2005, the ITSOP Committee, in conjunction with the Hampton Roads Incident Management Committee (HRHIM) initiated the development of the Regional Concept of Transportation Operations (RCTO). The first task of this initiative was to enhance the existing incident management plan. As part of this task, the ITSOP Committee membership was expanded to include members of HRHIM and local law enforcement and first responders.

B. Work Elements

The HRMPO staff will promote and integrate the following federal planning factors (PF) into the regional ITSOP program:

- PF 2 Increase the safety of the transportation system for all motorized and non-motorized users;
- PF 3 Increase the ability of the transportation system to support homeland security and to safeguard the personal security of all motorized and non-motorized users;
- PF 4 Increase accessibility and mobility of people and freight;
- PF 5 Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
- PF 7 Promote efficient system management and operation; and
- PF 8 Emphasize the preservation of the existing transportation system.

The HRMPO staff will continue to work closely with VDOT and the ITS Committee in integrating the planned and programmed ITS projects with the region’s transportation planning and programming processes. The staff will continue to work on the implementation of RCTO and enhanced regional incident management plan for Hampton Roads. The staff will also continue to integrate Transportation Operations Considerations into the metropolitan transportation planning process: ensure that transportation systems operations are reflected in regional plans and programs.

The HRMPO staff will provide technical and administrative assistance to VDOT and the ITSOP Committee. The staff will oversee the interagency coordination and also participate in related ITS meetings, conferences, and workshops. The HRPDC staff will also be responsible for the preparation of bi-monthly agenda notices and related correspondence.

C. End Products

1. Release RCTO Final Report
2. Bi-monthly ITSOP Committee Agendas

D. Schedule

1. First Quarter FY 2009 – RCTO Final Document
2. Ongoing Activity – Bi-monthly ITSOP Committee Agendas

E. Participants

HRMPO, VDOT, Localities, Local transit agencies (HRT, WAT), HRHIM, VPA, Navy, FHWA, Virginia State Police (VSP), and local law enforcement.

F. Budget, Staff, Funding

	PL	TOTAL
HRMPO	\$50,000	\$50,000

5.4 Regional Freight Planning

A. Background

In FY 2002, the HRMPO staff received the 1998 freight data and performed a comprehensive analysis of freight movement in and out of the region. This analysis was also compared to the 1995 data to depict any and all major changes in the movement of freight within the region. In addition, the staff collected truck data and vehicle classification counts for nearly 200 locations throughout the region. The results of the freight movement and truck circulation analyses were summarized in the Intermodal Management System 2001 report. In FY 2006, the HRMPO staff began the task of updating the IMS 2001 report. In FY 2007, the HRMPO staff completed the IMS 2007 report, including several additional elements, such as a review of freight industry terminology, a list of public and private freight data sources, a military freight analysis, a commodity flow data analysis with existing (2004) and projected (2035) conditions and locations of freight bottlenecks within the region.

SAFETEA-LU stresses the importance of freight movement for the nation. Truck, rail, and maritime goods movement considerations need to be included in the region's transportation plans and programs. At the State level, Virginia's first initiative to address increased freight needs is included in the Virginia Statewide Multimodal Transportation Plan, VTRANS2025. VTRANS2025 identifies specific strategies to incorporate freight issues into transportation planning and project development. VDOT, in cooperation with FHWA, is continuing to conduct a statewide study of essential freight infrastructure and incorporating that information into Virginia's statewide planning efforts.

Based on VDOT's 2005 proposal to use the Rural Transportation Planning Assistance Program to achieve regional long-range planning for rural areas of each PDC, the HRMPO staff will continue to coordinate with the HRPDC staff as it includes its rural localities in the regional freight planning process.

B. Work Elements

The HRMPO staff will promote and integrate the following federal planning factors (PF) into the regional freight-planning program:

- PF 2 Increase the safety of the transportation system for all motorized and non-motorized users;
- PF 4 Increase accessibility and mobility of people and freight;
- PF 5 Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
- PF 6 Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
- PF 7 Promote efficient system management and operation; and
- PF 8 Emphasize the preservation of the existing transportation system.

In FY 2009, the HRMPO staff will continue to maintain the region's freight planning efforts through updates to databases, outreach to stakeholders, and additional freight data analysis as needed. HRMPO will carry out the following regional freight planning activities:

1. Continue to assist VDOT and FHWA in their statewide study of essential freight infrastructure by soliciting and documenting feedback from representative jurisdictions on the critical freight issues on local and regional transportation systems and by reviewing and verifying employers within the MPO region that employ more than 100 persons and generate freight traffic.
2. Work with VDOT to develop a Hampton Roads Freight Model. This is a new initiative to develop a truck-forecasting model for the region. VDOT has recognized HRMPO as the statewide leader in freight planning and has selected Hampton Roads to assist in the development of this new model.
3. Continue to obtain and analyze regional truck data collected by VDOT and incorporate this data into the CMP/Freight database.
4. Continue to participate in freight stakeholder meetings and workshops, including the Virginia Freight Advisory Committee (VFAC).

C. End Products

1. CMP/Freight Database
2. Freight Data Analysis – as needed

D. Schedule

On-going activity

E. Participants

HRMPO, VDOT, Localities, VPA, Navy, FHWA, Private Freight Stakeholders

F. Budget, Staff, Funding

	PL	TOTAL
HRMPO	\$55,000	\$55,000

6.0 TRANSIT PLANNING

6.1 Coordinated Public Transit – Human Services Transportation Plan

A. Background

In accordance with SAFETEA-LU, projects proposed to receive formula funding from three specific FTA programs must be derived from a locally developed public transit-human services transportation plan (Coordinated Plan). The Coordinated Plan should enhance access to transportation for elderly, disabled, and low-income individuals, minimize duplication of services, and encourage a cost-effective transportation program. Development of the Coordinated Plan entailed extensive outreach and resulted in a competitive selection process for projects. As the designated recipient for Section 5307 funds, Hampton Roads Transit (HRT) is the default recipient of the newly formularized Job Access and Reverse Commute (JARC) and New Freedom funds and agreed to lead the development of the Coordinated Plan.

The three FTA programs associated with this Plan are:

- 5310 – Special Needs of Elderly Individuals and Individuals with Disabilities
- 5316 – Job Access and Reverse Commute
- 5317 – New Freedom

FTA allows recipients to apply for funding (up to ten percent of available program funds) for planning, technical assistance, and project administration to cover costs associated with the development and implementation of the Coordinated Plan and the competitive selection process prior to applying for project implementation. These funds will be used to cover costs, including staff time, associated with administering the program, as well as developing the Coordinated Plan.

Initial work on the development of the Coordinated Plan took place in the fall of 2006. The initial work group, consisting of MPO, HRT, and WAT staff, devised plans for soliciting the involvement of public and private providers of transportation services, as well as involvement from the general public. A list of stakeholders was compiled of agencies, businesses, organizations, and individuals that responded to the solicitations for involvement.

Meetings were held with the stakeholders in March 2007, November 2007, and March 2008 to assess available services, assess needs for these types of services, and develop strategies for addressing gaps in service to the targeted populations. The stakeholders were directly involved in the development of the Coordinated Plan. The Draft Coordinated Plan underwent review by the TTC and the public in March 2008 and received final MPO endorsement in April 2008. The *Coordinated Public Transit – Human Services Transportation Plan for Hampton Roads, Virginia* was adopted in April 2008.

The Coordinated Plan addresses, in part, several of the Planning Factors (PF) included in Section 450.306(a) of the SAFETEA-LU Final Rule:

- PF 4 Increase accessibility and mobility of people and freight
- PF 5 Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns
- PF 6 Enhance integration and connectivity of the transportation system, across and between modes, for people and freight
- PF 7 Promote efficient system management and operation

During FY 2009, primary work under this task will be the implementation of the adopted Coordinated Plan.

B. Work Elements

Work activities include the following:

1. Finalize first round of projects via competitive selection (FY 2006 JARC & New Freedom funding) and submit for FTA approval.
2. Finalize competitive selection for FY 2007 and FY 2008 funding; await FY 2009 appropriations for future action.
3. Monitor reauthorization activity for future consideration.

C. End Product

Compilations of selected projects based on selection process detailed in the Coordinated Plan document.

D. Schedule

1. Schedule for Work Element (WE) 1 – June/July 2008
2. Schedule for WE 2 – Second quarter of FY 2009
3. Schedule for WE 3 – Third and fourth quarters of FY 2009

E. Participants

HRMPO, HRPDC, HRT, WAT, local governments, VDRPT, VDOT, human services agencies/organizations, private and private non-profit paratransit service operators, FHWA, FTA, other interested parties.

F. Budget, Staff, Funding

	5303	5316	5317	TOTAL
HRMPO	\$20,000			\$ 20,000
HRT		\$65,086	\$37,475	\$102,561
TOTAL	\$20,000	\$65,086	\$37,475	\$122,561

6.2 TDCHR – Performance Monitoring and Evaluation

A. Background

The Transportation District Commission of Hampton Roads (TDCHR) is required to meet the demands for public transportation in an effective and efficient manner. The collection of information supports the evaluation of services that, in turn, supports the modification and improvement of existing services and supports the implementation of new services.

B. Work Elements

The Scope of Work for this project includes the following tasks.

1. **Goals, Objectives, Needs and Measure:** Goals and objectives to address needs are established each year as part of the Policy/Planning Cycle. Performance measures are used to determine if Goals and Objectives are being achieved.
2. **Service Consumption and Performance:** Monitor services and collect and assemble information on service characteristics, operating statistics, financial results, service quality, and ridership data for fixed route, commuter (Express and Work trips) Hampton Schools, special services, trolley services, and paratransit services, etc. Data will be used to make adjustments to existing services and to develop recommendations for future services. Data collection will include trail checks, boarding and alighting counts, schedule adherence checks, electronic fare box readings, and field surveys.
3. **Market Environment and Performance:** Assemble and assess secondary data and primary research in the form of: socioeconomic and demographic data from census data and proprietary reports; land use from local planning agencies, field surveys and special reports; customer complaints, suggestions and request; market research; requests from private service providers to operate various services; and special studies and surveys. The data will be acquired from a variety of sources including: the Hampton Roads Planning District Commission staff, city officials and staff, board members, private providers, and the public.
4. **Evaluate Proposed and Existing Services:** Evaluation of the performance of existing services entails the computations of the values of measures of effectiveness and efficiency and comparing these values to industry standards or to peer groups. Analysis for new services involves forecasting and comparison with warrants for service design. Opportunities are identified and new services are proposed. Continued compliance with the Americans With Disabilities Act will also be monitored and evaluated.
5. **Recommendations and Documentation:** Developed in a number of formats to accommodate their audience and purpose. Routine monthly and quarterly reports are principal means for management to monitor performance. Reports containing recommendations for service are the annual Transportation Service Program (TSP) and proposals for specific service modifications and new services. Other reports include: monthly ridership reports, fare and transfer

analysis, Financial Capacity analysis, the annual budget and financial reports, the annual update to the Transit Development Program, and the annual Transportation Improvement Program which contains a capital improvements and the use of flexible funding for innovative and experimental service implementation. The TDCHR staff will continue to coordinate with city and MPO staff to develop service and capital improvement plans through the TSP and TIP planning process.

6. **Development of Performance Measures:** Upon approval of performance measures from the Commission, develop databases and data analysis. Format and prepare monthly and quarterly reports. Develop annual report containing route-by-route and system productivity information by service period.
7. **Installation of new Giro Scheduling Software:** Install, train, develop, monitor, and maintain new Giro scheduling software. The software was installed in the spring of 2002. It is designed to permit improved coordination between the scheduling, dispatch, and payroll functions. The automated features of the software will enhance HRT's ability to provide more cost effective schedules and run cuts.

C. End Products

1. Annual Goals and Objectives
2. Monthly and Quarterly Performance Reports
3. Annual Transportation Service Program
4. Annual Transit Development Program Update
5. Transportation Improvement Program/Annual Element
6. Annual Budget
7. Quarterly Financial Reports
8. Financial Capacity Analysis
9. Performance Measures
10. Integration of new Giro Scheduling Software

D. Schedule

The above activities are an ongoing effort and thus carry no specific completion date.

E. Participants

HRT

F. Budget, Staff, Funding

	5303	CO 5303	5307	TOTAL
HRT	\$150,000			\$150,000
TOTAL	\$150,000			\$150,000

6.3 WAT – Performance Monitoring and Evaluation

A. Background

The creation of a Regional Transit Authority comprised of the Counties of York and James City, the City of Williamsburg, the College of William and Mary, and the Colonial Williamsburg Foundation continues to require planning support for the Williamsburg Area Transport (WAT) vision for a seamless regional system.

Initiatives approved or in planning for the next fiscal year will increase service miles over 50% in providing an estimated 3 million trips to citizens, guests and students of the City of Williamsburg, James City County, York County, the College of William and Mary, connecting service to Hampton Roads Transit in Newport News, the Colonial Williamsburg Historic Area and Historic Triangle. Phased initiatives include the following:

- Increased Service Frequency and Sunday service
- Trolley service connecting commercial/residential of Merchants Square (Colonial Williamsburg), High Street (City of Williamsburg) and New Town (James City County). Bus connections to Marquis development (York County)
- Additional employee connections from the City of Newport News, and Counties of Charles, New Kent and Surry to Greater Williamsburg to address a shortage of future labor required for the food service, retail, warehousing and hospitality industries. The collection and analysis of information to ensure this unprecedented system growth is effective and efficient, thus ensuring continued support from our partners including regional, state and federal is vital.

B. Work Elements

The scope of work that supports this need follows:

1. **Objectives and Measures** - Objectives, goals, and strategies are formulated and established as part of the Strategic Management Plan for the new Williamsburg Area Transit Regional Authority and to meet planning requirements of our local, state and federal partners. Quantifiable measures and strategies to develop these objectives are established and monitored on a month-to-month basis and incorporated in monthly, quarterly, mid-year, and annual reports to Board, respective Advisory committees and State and Federal partners.
2. **Service Consumption and Performance** - Service monitoring and data collection on service characteristics, (i.e. trip purpose, fares, revenue miles, passenger miles, etc.), service efficiency (cost per mile, revenue to expense ratio, etc.), service effectiveness (detailed passengers reports, riders per mile and hour, etc.), and service quality (i.e. service disruptions and accidents, customer complaints, vehicle support, etc.) will increase in establishing baseline data to help the Board shape policy and meet new State and Federal requirements. Data is collected with the assistance of administrative and operations personnel on a daily and monthly basis, and incorporated in monthly, quarterly, and annual reports..Data will be used to adjust establish goals and objectives for the Regional Authority.

3. **Evaluate Proposed and Existing Service** - Annual evaluation of the performance of existing services entails the computation of values and measures in the form of performance ratios for service effectiveness and efficiency. Performance data developed will be developed in line with accountability measures being developed through the Virginia Department of Rail and Public Transportation. These values are analyzed on a trend basis, and with other transit systems as needed. Evaluation of phased improvements of Williamsburg Area Transport approved in the Hampton Roads and State Transportation Improvement Plan began in Fiscal Year 2007 and continue through Fiscal Year 2010. Service plans include the following: Update of 20 year Operating and Capital Plan, Phased Service Plan, Update of Comprehensive Plans Transportation element for Counties of James City and York plus City of Williamsburg and Staff Training Program.
4. **Bus Stop Improvements** - Safe, convenient stop locations conducive to customer needs will be bolstered by a re-inventory of assets in and around boarding areas. Evaluation will include a review of Agency assets (Bus stops poles, placards, benches, shelters) condition and location in establishing a Replacement Plan. Other aspects of this re-inventory will include a re-assessment of amenities in and around stops evaluating the need for pedestrian improvements as pedestrian crosswalks, lighting and bike lockers Such factors as engineering, environmental, usage, and pedestrian safety will be analyzed in re-inventory analysis.
5. **System Revenue/Partnership Evaluation** - Day, Weekly and Monthly passes and off-site sales locations for these fare types will be evaluated for implementation to reduce resources necessary for the current cash based system. Plans for inside, outside advertising and private support of services will be evaluated and presented for Board approval to reduce the dependency on Federal, State and local contribution.
6. **Develop Organization Internal Support** - In becoming an Authority, Williamsburg Area Transport will assume functions once provided by local government including Human Resources, Risk Management, Procurement, Information Technology and Legal. Evaluation of operational support is needed to ensure the most efficient and effective management of these functions.
7. **Evaluation of Service to Seniors and Disabled** - The Hampton Roads Region is developing a coordinated plan in response to the SAFETEA-LU New Freedom Program, a federal initiative encouraging effectiveness and efficiency through coordinated transportation services for seniors and the disabled. The plan is expected to be fully operational the FY 08-09. With a growing senior population in our region surpassing state and national growth trend rates, coordinated services planning and evaluation are essential.
8. **Federal Data Requirements** - Beginning in the Fiscal Year 1997, Williamsburg Area Transport began collection of National Transit Data required by systems serving urbanized area. With the increase in growth through a Regional Authority this activity is becoming more challenging for a limited staff and collection/statistical analysis require process re-evaluation and automation. New

federal requirements for Limited English Proficiency, Disadvantaged Business Enterprise and Title VI will require updating policy in each of these areas.

9. **Recommendation Reports** - Reports developed in a number of formats to accommodate local, State, and Federal government needs are provided on a monthly, quarterly, and annual basis. These reports are necessary to show resource usage to various levels of government that support transportation. Reports containing recommendations are part of the annual development of goals and objectives for the Authority.

C. End Products

1. For Work Element (WE) 1 – FY 2008 WAT Strategic Plan Summary and FY 2009 WAT Strategic Plan reports for quarterly, mid-year, and annual review by Advisory Committees and the Board of Directors. These reports will promote efficient management and operation of regional transit.
2. For WE 2 – Establishment of baseline data with assistance of consultant to measure efficiency (i.e. cost per mile and per hour, revenue to expense ratio, etc.), service effectiveness (i.e. trips per mile and per hour, and service quality (i.e. service interruptions and accidents) for the Authority to evaluate and plan for enhanced integration of a regional network. Reports generated from data will demonstrate to the public, Board, and local, state, and federal partners the efforts to continue to promote efficient and effective management of transit services.
3. For WE 3 - Transportation Service Plans for the implementation of phased improvements that will double service delivery over a three-four year period (FY 08-10), provide service on Sundays and to un-served areas, plus provide transit oriented development alternatives to the single occupancy car. Service plans include additional connections to other Transit Systems (HRT, Bay Transit) and adjoining regions in helping meet an identified labor shortage in Assessing the Future Labor Market in Greater Williamsburg published for the Greater Williamsburg Chamber & Tourism Alliance, February 2007.

Transportation Service Plans outcomes expected include the following: a) Increase integration and connectivity between regions and transit properties to meet growth exceeding local, state and national trends b) support new Economic Development Center forecasts for employment. c) Protect environmental objectives for mixed use transit-oriented development and d) increase mobility of people across regions that may have limited auto access and/or transportation options.

4. For WE 4 - Complete re-inventory of all WAT assets (bus –stops, shelters, facilities) with summary providing condition, security and safety assessment, replacement need and requirements for expanding public amenities. Summary report will aid resource planning and ensure that public transit assets are preserved and distributed equitably in accordance with Title VI.
5. For WE 5 – Development of weekly and monthly pass system and Outside advertising Program. Both products to promote management efficiency by helping contain contribution requirements by local, state and federal partners.

6. For WE 6 – Plan for WAT to assume functions (IT, HR, Fiscal, Procurement etc.) as Authority previously managed through umbrella of local government. The purpose is to ensure that organization functions continued to be managed in an efficient and effective manner.
7. For WE 7 – Implementation of Hampton Roads Human Service Coordination Service Plan.
8. For WE 8 - DRPT performance reports and National Transit Data Base on-going monthly and annual reports. Updates of Limited English Program, Disadvantaged Business Program and Title VI. Title VI update will include GIS mapping of services ensuring equitable distribution of service mobility to all populations.
9. For WE 9 - FY 09-10 WAT service proposals for adoption by Board and presentation to local, state and federal partners for evaluation and approval. Proposals to serve as foundations for increasing regional mobility, enhancing economic development, improving quality of life and environment and as a solution to more efficient use of road network.

D. Schedule

1. For Work Element (WE) 1 –Quarterly, mid-year, and annual reports.
2. For WE 2 – Ongoing quarterly, mid-year, and annual reports/presentations.
3. For WE 3 - Ongoing quarterly, mid-year, and annual Service Transportation Plan reports/presentations.
4. For WE 4 – Draft assessment report October 2008. Summary Report with Recommendations November 2008. Inclusion of replacement/expansion needs in Capital Improvement Program and inclusion in twenty year update of operating/capital needs.
5. For WE 5 – Pass program on-going. Request for Proposal for Advertising to be completed by August 2008 with implementation September 2008.
6. For WE 6 - On-going with completion date targeted for December 2008.
7. For WE 7 – Ongoing activity.
8. For WE 8 – Ongoing activity.
9. For WE 9 – Service proposals to be completed by November 2008.

E. Participants

WAT Board, Advisory Committees, General Public, regional stakeholders, MPO, VDRPT, HRT, FTA, and other local, state, and federal agencies staff.

F. Budget, Staff, Funding

	5303	CO 5303	5307	TOTAL
WAT	\$100,000			\$100,000
TOTAL	\$100,000			\$100,000

6.4 Feasibility/Corridor Studies

A. Background

Feasibility and corridor studies will be conducted for the corridors specified under Work Elements. This will involve the MPO, VDOT, VDRPT, HRT, WAT, local governments, FHWA, FTA and environmental, resource and permit agencies. The funding amounts reflect the total estimate to complete the respective studies, which may be multi-year tasks. There will also be a reasonable opportunity for citizen participation in this cooperative process.

Feasibility and Corridor Studies are continuing for the evaluation of transportation improvements within the TDCHR Service Area. Continued project development and planning are based on MPO and FTA approval, leading to project funding agreements between HRT, City and State Governments, and FTA for construction.

B. Work Elements

- a. **Extensions to the Norfolk Minimum Operable Segment (MOS)LRT Line** - Support the planning and conceptual engineering for potential extension to the Norfolk LRT project, including ridership forecasts, capital and operating costs, and provide planning information to further advance the project toward the next phase.
- b. **Peninsula Corridor Rapid Transit Study** - Continue the Alternatives Analysis/Draft Environmental Impact Statement (AA/DEIS) on the Peninsula Corridor Rapid Transit Study. This planning effort will investigate numerous rail alternative alignments and technologies and carry the most promising ones into the DEIS. The DEIS will define the numerous technical planning elements required under the NEPA regulations. It will also provide the planning information necessary to further advance the project toward the next phase.
- c. **Norfolk Naval Station Transit Study** - Initiate the Systems Planning/Alternatives Analysis/Draft Environmental Impact Statement (AA/DEIS) for the LRT or other fixed guideway extension to Naval Station Norfolk. This planning work will evaluate and recommend the most appropriate alignment to access the Naval Station, and determine the best connection to the Norfolk MOS-LRT Line. Once a Preferred Alignment has been selected, the DEIS process will be initiated. The DEIS will include the numerous technical planning elements required under the National Environmental Policy Act (NEPA) regulations. This Study will also provide extensive information necessary to further advance planning of the project. Associated bus service improvements and park and ride facilities will be included in these analyses.
- d. **BRT Feasibility/Conceptual Engineering/Corridor Studies** - Feasibility and Corridor Studies are planned for the evaluation of transportation improvements within the TDCHR service area. The service area/corridor improvements will undergo project development, planning and conceptual engineering to identify alignments and potential ridership via innovative Bus Rapid Transit (BRT) options. Maintenance facility needs will be included in the analysis/design. BRT is defined as a holistic approach to planning and implementing transit options

combining facility, systems, and vehicle investments to deliver high quality transit to patrons.

The specific building blocks of BRT service include creatively combining rights-of-way, vehicles, stations, operations, service design, and intelligent transportation systems within the corridor environment for easier navigation. BRT offers such potential benefits as the flexibility to meet customer needs through high quality links to community based services, convenience through elimination of transfers, and greater speed through skip-stop or express service, resulting in higher capacity vehicles from innovative BRT total system designs.

Potential BRT service will be evaluated to examine cost effective expansions of the Oceanfront BRT. This will include feasibility, costs, ridership and potential financial strategies.

- e. **Passenger Ferry Service Expansion** - Hampton Roads Transit operates passenger ferry service between the Norfolk and Portsmouth waterfront areas. This study effort focuses on the feasibility of expanding ferry service between other areas within the TDCHR service area. These efforts include development of operations plans and costs for expanded ferry service and related docking needs/bus circulation/park and ride/transit center functions. Financial feasibility will also be examined.

C. End Products

All Study end products for Work Elements (1-5) carry the future option for service implementation.

D. Schedule

Work Elements (1-5) are scheduled as current and ongoing tasks in FY09.

E. Participants

Participants for Work Elements 1 & 2 include HRT, FTA, and associated consultants

Participants for Work Elements 3 – 5 include HRT and associated consultants.

F. Budget, Staff, Funding

	Work Elements	5303	CO 5303	5307	TOTAL
HRT	WE 1			\$1,000,000	\$1,000,000
HRT	WE 2			\$5,000,000	\$5,000,000
HRT	WE 3			\$5,000,000	\$5,000,000
HRT	WE 4			\$1,000,000	\$1,000,000
HRT	WE 5			\$150,000	\$150,000
TOTAL				\$12,150,000	\$12,150,000

6.5 Disadvantaged Business Enterprise Planning

A. Background

On an annual basis, Hampton Roads Transit (HRT) is required to update its DBE Plan and Program for the Federal Transit Administration (FTA). As part of this recurring federal requirement, it is necessary for HRT to measure/identify the availability and utilization of DBEs in the external procurement practices of HRT. Procurement opportunities should also be reviewed and projected on an annual basis. There is also a need to review on a continuing basis HRT's compliance with the DBE Program requirements codified at 49 CFT Part 26. As part of the compliance monitoring process, on an on-going basis, HRT is required to review, measure, and evaluate actual performance/compliance with the DBE Program requirements in order to plan realistic DBE participation goals. The ongoing assessment/evaluation process is critical to full compliance with the federal requirements and continuation of funding from the FTA.

B. Work Elements

1. Annually conduct an internal study of compliance with the DBE Program/Plan requirements. The study should identify any areas of non-compliance and recommend strategies to ensure Agency-wide implementation and compliance with the DBE Program requirements and procedures.
2. Identify DBE procurement opportunities and plan outreach initiatives to recruit local and specialty DBE firms to participate in HRT's procurement process.
3. Annually, conduct an informal study of the real availability of certifiable/certified DBEs, MBEs and WBEs in the Hampton Roads Transit's Metropolitan Statistical Service Area for use by the HRT Procurement Department in soliciting potential vendors.
4. Conduct a review of the procurement opportunities on the new rail project for DBEs, MBEs and WBEs.
5. Plan outreach initiatives to ensure that there are ready, willing and capable DBEs to participate in this new economic initiative for Hampton Roads Transit Metropolitan Statistical Area.

C. End Products

As indicated in the above bulleted section.

D. Schedule

The above activities area an ongoing effort and thus carry no specific completion date.

E. Participants

HRT staff and consultants.

F. Budget, Staff, Funding

	5303	CO 5303	5307	TOTAL
HRT	\$50,000	\$48,523 ^①		\$98,523
TOTAL	\$50,000	\$48,523 ^①		\$98,523

^①8/27/08: MPO staff administratively modified the estimated FY-08 Section 5303 carry over funds of \$32,000 to reflect the actual carryover of \$48,523 FY-08 Section 5303 funds.

6.6 ISO 14001:2004 Planning and Registration

A. Background

In 2005, Hampton Roads Transit (HRT) was one of ten transit agencies in the country selected to participate as a pilot agency in the FTA's initiative of Environmental Management System (EMS) training and assistance for implementing an ISO 14001 based EMS. This program supports President Bush's Executive Orders 13148 "Greening the Government" and 13274 "Environmental Stewardship and Transportation Infrastructure Project Reviews." These initiatives direct federal agencies to promote environmental stewardship in the nation's transportation system while streamlining the environmental review and development of proposed transportation projects.

Through its participation in the FTA's EMS training, HRT developed and implemented an EMS for its HQ Maintenance and Operations Facility. This program produced a plan designed to enable HRT to enhance its ability to analyze, control, and reduce environmental impacts, while operating with greater efficiency and control. The ISO 14001:1996 Standards served as the basis of this training, from which the FTA left open the option for each pilot agency to pursue ISO certification.

Since that time, HRT has made a commitment to educating and training its employees to improve environmental performance and implement sustainable practices. On July 20, 2005, HRT became one of the first two agencies in the American Transit Industry – and the first in Virginia – to become a signatory of the International Charter of Sustainable Development. This action further demonstrated HRT's commitment to sustainability, and made accountable its efforts to operationalize the EMS Program and achieve ISO 14001 certification.

HRT plans to conduct a GAP Analysis on its existing EMS Program, update the "fenceline" facility with ISO 14001:2004 Standards, and operationalize the EMS across all HRT maintenance and operations facilities. Once this is accomplished, HRT will be able to control, document, manage and incorporate all aspects of the EMS Program into current and future planning, development, operations, and management of projects and facilities. Pending availability of funding, HRT's goal is to complete the ISO registration process by June 2009.

B. Work Elements

1. Adjust existing EMS through Corrective Action Program following update and operationalize ISO 14001:2004 Standards for all HRT facilities
2. Conduct compliance audit by 2nd or 3rd party
3. Implement contract with ISO Registration Audit Certified Company for all HRT facilities

C. End Products

1. Registration Audit Report
2. Completed ISO 14001:2004 Registration

D. Schedule

The EMS Program will be on-going once implemented across all maintenance and operations facilities. The initial ISO 14001:2004 Registration process will take approximately three months, to include Registration Audits on pre-assessment phase, system documentation, and operations.

E. Participants

HRT staff with consultant

F. Budget, Staff, Funding

	5303	CO 5303	5307	TOTAL
HRT/Consultant	\$50,000			\$50,000
TOTAL	\$50,000			\$50,000

6.7 Transit Center Upgrades

A. Background

The purpose of this effort is to provide for upgrades to existing Hampton Roads Transit (HRT) transfer facilities and engineering/design for new facilities to improve HRT transfer activities at various locations throughout the Hampton Roads area. The work includes analysis of potential new transfer center locations.

B. Work Elements

1. Planning: base mapping, coordinating with city staff, record research, site evaluation, and reviewing existing and future transit services.
2. Design: survey data, conceptual plans, final plans and specifications.
3. Environmental Assessment

C. End Products

1. Feasibility studies for new transfer center locations and plans to upgrade all HRT transfer centers that will include, but not be limited to the following:
 - a. Infrastructure improvements
 - b. Architectural work and construction to maintain ADA and FTA compliance
 - c. Operational enhancements (traffic flow, safety, security, etc.)
 - d. Customer amenities
2. Architectural/Engineering documents/drawings for new and upgraded center

D. Schedule

Transit Center Upgrades are scheduled as current and ongoing tasks in FY-09.

E. Participants

HRT

F. Budget, Staff, Funding

	5303	CO 5303	5307	TOTAL
HRT			\$500,000	\$500,000
TOTAL			\$500,000	\$500,000

6.8 Regional Transportation Demand Management (TDM) Program (TRAFFIX)

A. Background

The transportation demand management program for Southeastern Virginia (TRAFFIX) is a coordinated regional approach to reducing traffic and traffic congestion to maintain or improve the quality of life for residents by encouraging ridesharing, transit usage, telecommuting, and working with city/regional comprehensive planning agencies for incorporation of TDM alternatives in land use in policy decisions.

This program covers an extensive geographic area to include Hampton Roads, James City County, Eastern Shore, Isle of Wight and the northern counties of North Carolina. TRAFFIX has been functionally organized as follows:

- Program Management
- Planning, Evaluation and Analysis
- Administration
- Sales
- Marketing

The Transportation District Commission of Hampton Roads administers TRAFFIX. It receives and administers program grants. A TDM Traffix Oversight Committee (TOC) is comprised of staff members of HRT, FHWA, VDOT, VDRPT, HRPDC, and Cities. They provide policy guidance regarding program management. TRAFFIX Program management includes organizational development, strategic planning, program budget/funding, program development, program implementation, coordination and supervision.

- The TOC will review the annual work program, provide input, monitor budgets and implementation progress, evaluate program results and suggest changes for more efficient and/or effective operation.
- The TOC meets quarterly in FY 09.
- A TOC consists of representation from VDOT, DRPT, FHWA, HRPDC (MPO) and HRT will oversee the administration of the TRAFFIX contract, which will be issued through DRPT.

Programs

TRAFFIX includes the following on-going programs and activities:

- Provision of on-line computerized matching services to employer-based rideshare programs and the public in general.
- Regional telephone number, 1-800-700-RIDE. Printing and mailing of applicant match and renewal letters. Follow-up telephone calls. Rideshare database management.
- Establishment of joint use park intermodal park-and-ride lots.
- Promotion of high occupancy vehicle (HOV) lanes.
- Guaranteed Ride Program.

- Employer Programs.
 - Development of transportation alternatives
- Construction Mitigation and Congestion Management Programs – Participation in:
 - Naval Shuttle Service
 - Norfolk Electric Bus (Employee shuttle)
 - VB Wave
 - Commuter Fixed Route Service
 - I-64 Battlefield Boulevard
- Van lease program available to area employers/employees.
- Promotion of the Commuter Check Program (Navy's Transportation Incentive Program-TIP).
- Implementation and Coordination of TeleWork!VA Program
- GIS Mapping Program – for the development of transportation programs, employer programs.
- Promoting the planning, development, promotion and use of facilities and programs that facilitates the use of high occupancy transportation modes through active involvement in local activities relating to:
 - Public/private park-and-ride locations
 - HOV highway lanes
 - Land use planning
 - Site design
 - Clean Air Act compliance
- Advising and participating in the development of regulatory actions, including:
 - Transportation Demand Management and Congestion Management
 - Local transportation proffers
 - Air Quality Programs

Annual Work Program

In general, the TRAFFIX Program will be held responsible and accountable for activities and programs designed to provide resources, opportunities, special programs and/or information for commuters to engage in non-single occupant vehicles commute options such as Telecommuting; engage in programs that promote clean air; partner in programs that mitigate congestion during large construction projects; provide business outreach for the purpose of reducing employee commute trips; and promote the use of multi-modal support facilities including park and ride lots and HOV lanes.

Defined activities for the year include:

1. The development of detailed Goals and Objectives including a description of work activities, associated staff requirements, budget and evaluation criteria for each activity.
 - a. The Goals and Objectives must be approved by the TOC.
 - b. The Goals and Objectives must be presented and approved by the MPO Transportation Technical Committee.
 - c. The Goals and Objectives must be presented and approved by HRT's Commissioners.

2. Updates will be provided at each TOC meeting. The report will include the following:
 - a. Activity Description, Progress Update, Budget, and percent complete.
 - b. Periodic reports and program updates will be made to stakeholder groups, including:
 - i. The TRAFFIX Program Director will make a program updates to the MPO Transportation Technical Committee twice a year to present the annual work program, provide a progress update and a final evaluation of the previous year's program.

Sales (Outreach)

The identification of employers and activity centers and origins will rely significantly on analysis through the Congestion Management System for Hampton Roads coordinated by the Hampton Roads Planning District Commission. Employers located in corridors having a level of service will be prioritized and contacted to establish employer-based rideshare programs.

The Action Plan for an employer consists of four major elements: Initial Contact Phase, Organizational Phase, Promotion/Publicity Phase and Implementation Phase. The Initial Contact Phase is initiated when a TRAFFIX Commuter Transportation Coordinator meets with management of a major activity center (employer). The coordinator outlines the goals and objectives of decreasing "single occupancy vehicles" (SOV) on our roads and providing an alternative means of transportation. The employer is then informed how to perform a survey to determine employees' residences and ultimately how to match individuals to establish shared rides. If the employer does not wish to survey his employees, density plotting can be an alternative. The employer would provide the Coordinator the street address, city, zip and work schedule of all employees in an Excel spreadsheet format. The Coordinator would then use ARCview software program to perform density plotting for "instant" identification of car and vanpools. Potential transit service and area park and ride locations could also be identified. Alternative strategies are based upon the employer's specific needs.

During the Organizational Phase, top management will usually designate an individual in middle management to act as an Employee Transportation Coordinator (ETC) for the employer. This individual is often in the personnel or data processing department.

Before providing rideshare publicity, the TRAFFIX Coordinator will ask the employer what type of publicity is desired. Publicity can take the form of slide presentations, posters, fliers and vehicle displays. TRAFFIX staff may assist the employer in developing advertisements and articles for employee newsletters.

During the Implementation Phase a survey or density plotting is performed by the ETC and a TRAFFIX Coordinator. The results can be computerized or "instant" depending on the choice of whether to survey or density plot. If a survey is performed, individuals who show interest in ridesharing are contacted by a computer generated match letter. Follow-up telephone calls are made by TRAFFIX personnel to see if the match letter was received, if they were able to join or form a car or

vanpool, ride the bus and were knowledgeable of the Guaranteed Ride Program or additional programs available to them that were adopted by their employer (telecommuting, staggered or flexible work hours, etc.).

If interest is shown in becoming a vanpool driver, applicants are sent information on eligibility requirements, pricing and an application. Follow-up telephone calls are made by TRAFFIX Commuter Transportation Coordinators to encourage the formation of a vanpool program.

The TRAFFIX Coordinator will maintain contact with the ETC to provide program updates, literature, etc., to company employees.

Marketing

A comprehensive program of advertising, public relations and information is needed to induce and maintain use of TDM programs and services.

Management, Planning and Evaluation

Considerable organization development will continue to be required for TRAFFIX. This will include staff recruitment, extensive training, and development of support materials. Coordination within HRT and other agencies; cross-fertilization of ideas; feedback from on-the-job learning will present management challenges.

As there are a variety of programs, there will be a variety of effectiveness measures and techniques. TRAFFIX staff have developed a tracking report that reflects the various transportation alternatives used by employees (employer outreach program). In addition, a Benchmark evaluation will be performed this year. This will be done every two years to evaluate the strengths and weaknesses of the TRAFFIX Program.

B. Work Elements

As indicated in above section.

C. End Products

The TRAFFIX TDM program compliments CMS, IMS, or MIS analysis and recommendations. This involves major congested corridors, major corridors under construction, etc. The TRAFFIX staff economically provides outreach, marketing research, conclusion and recommendations to commuters, employers, activity centers located in a congested area and HRT's Planning Department. The program budget will be used for specific projects, awareness (speaking engagements, brochures, advertising, premiums), and incentives (Commuter Check, NuRide Program, Telework!Va., Guaranteed Ride Program), employer recognition, benchmarking, staff, overhead, and the purchase of vans to replace and expand the vanpool program.

D. Schedule

This is an on-going effort where each component builds upon itself each year to increase the overall results of the program. It is a cumulate process. The one item

that has a definite start and ending time frame is advertising. Advertising begins in the spring of each year and ends at the end of each calendar year so the budgets do overlap.

E. Participants

Internal Participants:

- Two Outreach Coordinators
- One NuRide Coordinator
- One TeleWork!Va Coordinator
- One Van Pool Manager/Administration
- One Director of the Traffic Program
- Marketing Staff
- Customer Service Staff

External Participants:

- Local Governments
- State Governments
- Over 200 major Hampton Roads Employers
- Potentially over 100,000 employees
- Participants encompassing the Virginia Eastern Shore, Northeastern North Carolina, Williamsburg

F. Budget, Staff, Funding

TDM BUDGET

Salaries and Benefits	\$ 450,000
Materials and Supplies	70,000
Brochures	
Letterhead/envelopes	
Promotional Items	
Advertising	444,330
Professional Fees	201,224
Ad Agency	
Benchmarking	
Bd Systems for rideshare software	
Program maintenance	
Travel and Meetings	15,000
Guaranteed Ride Program	25,000
Computer Hardware/software	
Upgrades	7,000
Overhead	20,720
Silverleaf Commuter Station Water	
And Cox Cable phone line	
Williamsburg Transportation Center	
Indirect Costs (4.61%)	56,854
Total	\$1,290,128

	CMAQ	5303	CO 5303	5307	TOTAL
HRT	\$1,290,128				\$1,290,128

7.0 SPECIAL STUDIES

7.1 Critical Issues in Transportation

A. Background

Continuing evaluation of the Long Range Transportation Plan and Congestion Management Process, along with key transportation problems and needs which are identified by local and regional leaders, will result in the identification of critical transportation issues for which detailed analysis and evaluation will be required beyond that usually applied to systems level transportation planning and analysis. While it is difficult to anticipate such issues before the fact, experience has shown that a mechanism is needed to allow the HRMPO staff to respond to critical transportation issues in a timely manner as they reveal themselves to the region.

B. Work Elements①

When a critical regional transportation issue is identified, either by the MPO, the localities, or by staff, an issue paper will be prepared which describes the issue in detail and outlines a scope of work and resources required to address solutions to the issue. Each such issue addressed under this task will result in the preparation of a written report, which identifies the problem, documents the analysis of the factors contributing to the problem, and describes the findings and recommended solutions to the problem or issue.

1. Contract with a consulting firm to conduct a study of best practices of metropolitan planning organizations.

C. End Products①

1. A report detailing the findings of the best practices study. The report should provide recommendations on issues including, but not limited to: mission, organizational/committee structure, membership, bylaws, communicating with the public and public access, and effective public involvement activities and strategies. With respect to public involvement, the report should provide best practices regarding: Title VI of the Civil Rights Act, Limited English Proficiency, Environmental Justice, and conducting outreach to low-income and/or minority communities.

D. Schedule①

1. Selection of a qualified firm is scheduled to take place by the end of August 2008. The final report is expected to be completed by mid-December 2008.

E. Participants

To Be Determined

F. Budget, Staff, Funding

	PL	TOTAL
HRMPO	\$120,000	\$120,000

①7/16/08: MPO approved a work element within Task 7.1 to conduct a consultant led study of best practices of metropolitan planning organizations.

7.2 Non-Driver Transportation Study

A. Background

Persons who do not drive being approximately half as mobile as those who drive, the HRMPO is determining ways to improve the mobility of non-drivers.

In previous fiscal years, MPO staff measured the mobility needs of non-drivers, used the National Household Travel Survey and a local survey to calculate the factors that improve non-driver mobility, performed a gap analysis for local neighborhoods, and located non-drivers living in Hampton Roads.

B. Work Elements

1. MPO staff will lead the non-driver steering committee (a sub-committee of TTC) in determining the specific focus of the non-driver research for FY09, based on the results of the six (6) previous non-driver reports including the location of non-drivers in Hampton Roads completed late in FY08. An example of the focus which the sub-committee may choose is a quantitative analysis of the effectiveness of locality zoning and land uses in promoting non-driver mobility.
2. MPO staff will conduct the non-driver research specified as described above.

C. End Products

A report of the FY09 non-driver research will be prepared by MPO staff, reviewed by the TTC and MPO, and approved by the MPO.

D. Schedule

The FY 2009 non-driver research will be completed by June 2009.

E. Participants

HRMPO, VDOT, local governments, and local transit agencies.

F. Budget, Staff, Funding

	PL	TOTAL
HRMPO	\$50,000	\$50,000

7.3 Coliseum Central Special Events Traffic Management Plan Study

A. Background

The City of Hampton has requested a traffic management plan study for special events and conditions in and around the Coliseum Central Area. With the completion of the Hampton Roads Convention Center, recent streetscape work on Coliseum drive that reduced the number of through lanes, removal of the flyover, and construction of Convention Center Boulevard between Armistead and Coliseum Drive, traffic conditions have changed, particularly as it relates to event traffic. The study area is bounded by Hampton Roads Center Parkway to the north, I-64 to the west, I-664 to the south and Armistead Avenue to the east.

The purpose of the study is to look at event conditions only and provide a series of recommendations for traffic management to ease events related congestion.

B. Work Elements

A complete literature search will be conducted as part of the study to gather event management strategies currently in place in other regions across the country. Deployment of ITS technologies and strategies, both on and off the interstate system will be evaluated and incorporated among potential solutions.

The Study will include an analysis and understanding of existing event traffic conditions, cause of conditions, location and scope of issues and problems including roadways and intersections within the study area. The City of Hampton will provide available traffic counts, studies, plans, and a schedule of special events for the study area.

The HRMPO will research, evaluate and develop potential solutions to ease congestion related special events and prepare a report documenting the conditions and recommendations resulting from the analysis.

C. End Products

Final Report and Presentation Materials

D. Schedule

Fourth Quarter FY 2009 – Final Report

E. Participants

HRMPO, VDOT, City of Hampton, HRT, Coliseum Central Business District Members

F. Budget, Staff, Funding

	PL	TOTAL
HRMPO	\$80,000	\$80,000

7.4 Suffolk Corridor Studies

A. Background

During FY-2008, the City of Suffolk requested an analysis of six corridor studies located throughout the city. The corridors are:

- Holland Road (US Route 58) from the west end of Route 58 Bypass to one mile west of Manning Bridge Road.
- Pruden Boulevard (US 460) from Godwin Boulevard to the Isle of Wight County line.
- Godwin Boulevard (Virginia Route 10) from Pruden Boulevard to the Isle of Wight County line.
- Nansemond Parkway (VA Route 337) from Wilroy Road to Chesapeake Corporate limits.
- Carolina Road (US Route 13) from Obici Boulevard to Route 13/32 split.
- Bridge Road (US Route 17) from Chesapeake Corporate limits to Isle of Wight County line.

During FY-2008, the HRMPO staff initiated the technical work on the Holland Road and Pruden Boulevard corridors. The report on the conclusions and recommendations for these two corridors is expected to be finished during FY-2008.

B. Work Elements

The staff will continue the analysis and completion of the remaining corridor studies during FY-09 and FY-10. A report will be prepared documenting the conclusions and recommendations resulting from the analysis of each of the corridors listed above. The reports will provide recommendations regarding access management policies for the corridor. In addition, the City requests that the study include recommendations on roadway projects and/or traffic signal improvements that may be necessary within the next ten years.

C. End Products

Final Reports and Presentation Materials

D. Schedule

One Corridor Study is expected to be completed in each quarter with priority based on City recommendations.

E. Participants

HRMPO, VDOT, City of Suffolk, HRT, FHWA

F. Budget, Staff, Funding

	PL	TOTAL
HRMPO	\$80,000	\$80,000

7.5 North Main Street Corridor Study

A. Background

The City of Suffolk has requested an analysis of the North Main Street Corridor in the downtown area of the City. The study will cover the area from Constance Road along Main Street to the US Route 58 Bypass at its interchanges with Pruden Boulevard and Godwin Boulevard. The old Obici Hospital site is located within the corridor and may be rezoned for other uses. Such rezoning may impact traffic volumes and patterns within the corridor.

B. Work Elements

The final report should provide recommendations regarding access management policies for the corridor. In addition, the City requests that the study include recommendations on roadway projects and/or traffic signal improvements that may be necessary within the next ten years.

C. End Products

Final Report and Presentation Materials

D. Schedule

First Quarter FY 2009

E. Participants

HRMPO, VDOT, City of Suffolk, HRT, FHWA

F. Budget, Staff, Funding

	PL	TOTAL
HRMPO	\$60,000	\$60,000

7.6 Multi-Modal Land Use Planning and Infrastructure Needs Study (Multimodal Planning Grant)^①

A. Background

The City of Suffolk and Isle of Wight County have been awarded a grant from the Commonwealth of Virginia Multimodal Planning Office. The goal of this study is to develop modeling and simulation techniques to help predict transportation deficiencies resulting from changes in land use designations. The modeling tool will integrate land use and transportation facility data from multiple jurisdictions to help identify impacts from changes in land use designations in a way that can be used to enhance, refine or modify existing plans, evaluate land use scenarios, and formulate strategies for changes to comprehensive land use designations and plans to maximize the return on transportation facility investments. The successful completion of this project will allow for predicting and prioritizing transportation facility deficiencies that should be considered in forecasting, planning and investment activities.

B. Work Elements

The project scope is to integrate land and road segment data via the development of a modeling tool. The modeling tool will have the functionality needed to evaluate land use and transportation facility data and predict relative impacts to the transportation infrastructure from land use changes.

Work Tasks are identified as follows:

1. Incubation and Design
2. Data Accumulation
3. Data Cleansing and Synthesis
4. Tool Development
5. Algorithm Analysis
6. Calibration and Testing
7. Scenario Runs and Testing
8. Stakeholder Integration
9. Project Conclusions
10. Presentation to Multimodal office

C. End Product

Final Report and Modeling Tool.

D. Schedule

Planned activity is schedule over the duration of one year, fiscal year 2009.

Phase 1 – Development	4 months
Phase 2 – Forecasting	3 Months
Phase 3 – Prioritization	3 Months
Phase 4 – Recommendations	1 Month
Phase 5 – Final Report	1 Month

E. Participants

City of Suffolk, Isle of Wight County, Consultant selected to complete task, Hampton Roads MPO, VDOT, VDRPT, HRT, WAT, FHWA

F. Budget, Staff, Funding

	STP	IN-KIND MATCH	TOTAL
SUFFOLK/ISLE of WIGHT CO/ CONSULTANT	\$450,000	\$50,000	\$500,000
TOTAL	\$450,000	\$50,000	\$500,000

^① 5/21/08: MPO approved the addition of Task 7.6 to the FY 2009 UPWP.

8.0 TRANSPORTATION DATABASE MANAGEMENT

8.1 Transportation Database/Geographic Information System Activities

A. Background

The collection and management of transportation data are major ongoing activities of the MPO staff. Information maintained in the databases includes demographic and economic data, the Census Transportation Planning Package, traffic counts for the region's roadway network, and other transportation-related data. Since much of the data used in transportation planning work is associated with a particular location, the organization and accessibility of transportation data can be improved by integrating the databases with a Geographic Information System (GIS).

A GIS is a system of hardware and software used for storage, retrieval, mapping, and analysis of geographic data. A GIS makes it possible to compare and/or analyze a variety of data *spatially*, or based on the location of the data in a common coordinate system.

MPO staff will continue preparation and maintenance of various maps, including base, major thoroughfare, transportation zone, and thematic maps used for planning purposes. In addition, staff will maintain digital aerial photographs obtained from the Virginia Geographic Information Network (VGIN) and the user interface, the *HR Map Viewer*, for the general public to access the photographs.

MPO staff will maintain the HRPDC Intranet Web, a website developed by MPO staff to assist in the cataloging and access of data and data sources.

MPO staff provides in-house training on a variety of GIS applications. In addition, staff will continue to research ways to provide GIS resources to the public in a user-friendly format. Work under this task also includes providing technical assistance on the use of the GIS and the production of a variety of thematic maps for staff, other agencies, and the public, upon request.

During FY 2007, staff began work on a GIS Library, which will consist of restructuring and modifying existing GIS data to more efficiently meet the day-to-day needs of staff GIS users. This work will entail reorganizing the storage of GIS data files, updating the source information, creating subsets of larger data files, and verifying the accuracy of attributes within the GIS data. Work on the GIS Library continued during FY 2008 and will be completed during FY 2009.

B. Work Elements

Work activities include the following:

1. Develop the GIS Library. During FY 2009 the HRMPO will launch a new GIS Server designed for the sole purpose of housing and cataloging data. This GIS server, called the GIS Library, will store the most current data the HRMPO has

available. In addition, the Library will contain metadata (data about the source, date and projection of the file being housed) for each dataset. Before entering the Library all files will undergo a rigorous review to insure completeness and accuracy. The results of this endeavor are threefold: 1) eliminate duplicate data within the agency 2) provide the most up-to-date copy of the data for both in-house and external use and 3) improve the access to data for staff.

2. Maintain and update the HR Map Viewer as new data becomes available.
3. Develop transportation data and/or maps for use in various reports, studies, plans and programs.

C. End Products

1. GIS Library
2. Reports, maps, and other documentation produced on an as-requested basis.

D. Schedule

1. GIS Library – Initial release in the fall of 2008, with ongoing maintenance afterward.
2. Maintenance of the HR Map Viewer is an ongoing task.

E. Participants

HRMPO, VGIN, local governments, HRT, and a variety of Virginia Planning District Commissions.

F. Budget, Staff, Funding

	PL	TOTAL
HRMPO	\$85,000	\$85,000

8.2 Regional Travel Time Study

A. Background

For more than 20 years, the MPO has collected travel time/speed data for auto travel on all major roadways in the Hampton Roads. Data collection for the regional study occurs approximately every five years. The latest update of the regional travel time/speed study was initiated during FY 2006 and resulted in a travel time database for the year 2005. In the 2000 and 2005 studies, data was collected using a GPS unit and analyzed using GIS technology.

In the regional travel time update, data is collected during the morning and afternoon peak hours. This data is useful for comparative analysis in Traffic System Management (TSM) studies and for documentation of network speeds for the Congestion Management Process (CMP) and the Long Range Transportation Plan (LRP). It is anticipated that the data will continue to be used in conjunction with the traffic count program as a means of tracking growth and congestion.

During FY 2007, the data collected in 2005 was analyzed, and two final reports were produced - a Trip Profile Summaries report, which included travel time run summaries for each roadway segment in the study network, and an Analysis report, which included a variety of analyses based on the collected data.

During FY 2009, it is anticipated that travel time data will be collected as part of the data input for special studies. In addition, the current travel time system hardware and software will be evaluated during FY 2009 to determine their suitability for use in the next regional study in 2010.

B. Work Elements

1. Evaluate the current travel time system hardware and software to determine their suitability for use in the 2010 regional study.
2. Maintenance of existing travel time system and data.
3. Provide technical assistance with data and/or travel time system for special studies.

C. End Products

No specific end products for FY 2009, although an internal needs assessment regarding the current travel time system will be conducted.

D. Schedule

The evaluation of the current travel time system will be completed by the spring of 2009. Technical assistance will be provided on an as-requested basis.

E. Participants

HRMPO

F. Budget, Staff, Funding

	PL	TOTAL
HRMPO	\$10,000	\$10,000

9.0 AIR QUALITY PLANNING

9.1 Transportation Air Quality Planning

A. Background

To help ensure future air quality, the HRMPO will prepare a Long Range Transportation Plan (LRP) and Transportation Improvement Program (TIP) that conforms to federal air quality standards. In order to achieve a conforming plan, air quality impacts will be considered during the entire regional transportation planning process.

B. Work Elements

HRMPO's air quality efforts will entail several tasks:

1. HRMPO will continue to monitor the changes in the national ambient air quality standards and assess the expected impact.
2. VDOT will be responsible for conducting the air quality conformity analysis (Conformity) for the LRP and TIP. HRMPO will assist VDOT in this analysis.
3. HRMPO and VDOT will, as necessary, evaluate air quality conformity impacts of land uses and regional transportation projects proposed for the LRP and TIP.
4. The HRMPO will continue to perform the analysis of air quality benefits associated with requests for CMAQ funded projects.

C. End Products

LRP and TIP that successfully pass Air Quality Conformity Analyses.

D. Schedule

1. The 2030 LRP has passed Conformity. Any amendments to the 2030 LRP that are not considered air quality neutral will require another Conformity analysis.
2. The current TIP (FY 2006-2009) has passed Conformity. The MPO does not intend to accept any amendments to the current TIP that would require another Conformity analysis.
3. The Conformity analysis for the draft FY 2009-2010 TIP project list began in March 2008.
4. LRP and/or TIP amendment requests will be considered on an ongoing basis.

E. Participants

HRMPO, local governments, HRT, WAT, VDOT, VDRPT, FHWA, FTA, other agencies, general public.

F. Budget, Staff, Funding

	PL	STATE	TOTAL
			\$15,000
HRMPO	\$15,000		
VDOT		\$71,770	\$71,770
TOTAL	\$15,000	\$71,770	\$86,770

10.0 TECHNICAL SUPPORT

10.1 Transportation Technical Support

A. Background

A major staff function is to provide technical assistance to local jurisdictions and to other transportation-related organizations within the region on an as requested basis. As part of this technical support, MPO staff attends training sessions, meetings, conferences and public hearings conducted by federal, state, regional and local agencies and other organizations on subjects affecting the regional transportation planning process.

The HRMPO continues to offer technical support and coordination on a variety of activities including highway and transit projects, aerial photography, FTA contract certification, bicycle planning, park and ride lot analysis, state rail information, rail service demand analysis, data estimates for proposed transit developments, HOV impact analyses, and aviation-related issues.

This task includes the purchase of two replacement computers at an average cost of \$2,500 to maintain the technical capability necessary to carry out the activities described in the UPWP.

B. Work Elements

Work activities include the following:

1. Staff Support of Census and National Household Travel Survey (NHTS) Data

Since 1970 the HRMPO, its member jurisdictions, and the U.S. Bureau of the Census have worked cooperatively on many census related projects. Included in the transportation arena are the development of the questionnaire, preparation of business location listings and assistance in delivering the Census Transportation Planning Package (CTPP).

MPO staff has made extensive use of the Census Transportation Planning Package during past years. In addition, the National Household Travel Survey (NHTS) will be conducted in 2008. The staff anticipates continued activity regarding the CTPP, other Census products, and the NHTS in the following areas:

- The Census will continue to release products from the recently-developed rolling survey named the American Community Survey (ACS). MPO staff will continue to assist in the dissemination of ACS data through the HRMPO network of jurisdictions, agencies and individuals.
- It is expected that HRT will continue to make extensive use of the intercity commuting data for ridesharing and vanpooling efforts.

- Preparations for the 2010 Census are expected to begin during FY 2009 in the areas of transportation analysis zone definition (for use in the 2010 CTPP) and assisting localities with delineation of tract and block group boundaries.
 - The NHTS will be conducted in 2008. MPO staff will assist VDOT with reviewing the data for use in future travel model updates and other transportation analyses.
 - The MPO staff anticipates using the Census, ACS, and NHTS data in the following areas:
 - Validation of the regional transportation model.
 - Analysis of ways of improving the mobility of non-drivers.
 - Analyses of projects that serve regional movements.
 - Analysis of alternative transportation modes.
 - Assessing social (environmental justice) issues within the transportation planning process.
2. Public-private funding strategies have become an integral component in the financing plans for many major infrastructure improvement projects. Upon request, MPO staff will provide technical support in the evaluation of such financing strategies.
 3. Upon request, and in concert with the local governments, MPO staff will continue to evaluate several high-priority, regionally-significant transportation projects for which the lack of funding is the impediment to timely implementation.
 4. MPO staff will continue to work with local governments, state transportation agencies, local transit operators, and members of the General Assembly to assess the impact of potential and pending state and federal legislation.
 5. MPO staff will provide support, as appropriate, in the conduct of project level planning and environmental studies that may be required within the Hampton Roads MPA.
 6. MPO staff will provide technical support on aviation issues, including general and commercial aviation activity, airport facilities, and air service, on an as requested basis.
 7. The HRMPO will provide assistance to VDOT in updates to the Hurricane Evacuation Traffic Control Plan prepared by VDOT in January 2001. In addition, MPO staff will provide assistance, as requested, to the Virginia Department of Emergency Management (VDEM) and the U.S. Army Corps of Engineers (COE) during preparation of hurricane evacuation studies.

C. End Products

This task is primarily one of technical support to other activities and agencies. Therefore, the end products may not be of the HRMPO. However, under certain circumstances, end products may include reports and/or presentations.

D. Schedule

The activities under this task are of an ongoing nature.

E. Participants

HRMPO, local governments, HRT, WAT, VDOT, VDRPT, VDEM, COE, Census Bureau, FHWA, FTA,

F. Budget, Staff, Funding

	PL	5303	TOTAL
HRMPO	\$505,000	\$45,000	\$550,000

Hampton Roads Metropolitan Planning Organization
Unified Planning Work Program
FY 2009
Budget Summary Table

Task 1.1 revised 4/16/2008
Task 7.6 added 5/21/2008
Task 6.5 revised 8/27/2008

80

Task #	Description	HRMPO		VDOT		HRT					WAT	SU/IW	TOTAL										GRAND TOTAL
		PL	5303	SPR	STATE	5303	(fn)	Other	5307	5316	5317	5303	STP	PL	SPR	STATE	5303	(fn)	Other	5307	5316	5317	
1.1	MPO Administration	345,939	118,585											345,939			118,585						464,524
1.2	UPWP	50,000	25,000											50,000			25,000						75,000
1.3	VDOT Support			410,000	500,000										410,000	500,000							910,000
2.1	Transportation Public Participation	300,000							75,000					300,000						75,000			375,000
3.1	Maint & Use of 2030 Trans Models	30,000												30,000									30,000
3.2	Develop Hampton Roads 2034 LRP	340,000												340,000									340,000
4.1	TIP	70,000	65,000											70,000			65,000						135,000
5.1	Congestion Management Process	120,000												120,000									120,000
5.2	Transportation Demand Management	5,000	5,000											5,000			5,000						10,000
5.3	ITS Plan	50,000												50,000									50,000
5.4	Regional Freight Planning	55,000												55,000									55,000
6.1	Coordinated Human Services Trans Plan		20,000							65,086	37,475						20,000				65,086	37,475	122,561
6.2	HRT System Monitoring & Evaluation					150,000											150,000						150,000
6.3	WAT Monitoring & Evaluation											100,000					100,000						100,000
6.4	Feasibility/Corridor Studies								12,150,000											12,150,000			12,150,000
6.5	DBE Planning					50,000	(1)	48,523									50,000	(1)	48,523				98,523
6.6	ISO 14001:2004 Planning & Registration					50,000											50,000						50,000
6.7	HRT Transit Center Upgrades								500,000											500,000			500,000
6.8	Regional TDM - TRAFFIX						(2)	1,290,128										(2)	1,290,128				1,290,128
7.1	Critical Issues in Transportation	120,000												120,000									120,000
7.2	Non-Driver Transportation Study	50,000												50,000									50,000
7.3	Coliseum Central Traf Mgt Plan Study	80,000												80,000									80,000
7.4	Suffolk Corridor Studies	80,000												80,000									80,000
7.5	North Main Street Corridor Study	60,000												60,000									60,000
7.6	Multimodal Planning Grant											500,000						(3)	500,000				500,000
8.1	Trans Database/GIS Activities	85,000												85,000									85,000
8.2	Regional Travel Time Study	10,000												10,000									10,000
9.1	Transportation Air Quality Planning	15,000			71,770									15,000		71,770							86,770
10.1	Transportation Technical Support	505,000	45,000											505,000			45,000						550,000
	Total	2,370,939	278,585	410,000	571,770	250,000		1,338,651	12,725,000	65,086	37,475	100,000	0	2,370,939	410,000	571,770	628,585		1,338,651	12,725,000	65,086	37,475	18,647,506

- (1) Carryover Section 5303 Funds
(2) Residual State Matching Funds for CMAQ Projects
(3) STP Funds

Hampton Roads Metropolitan Planning Organization
Unified Planning Work Program
FY 2009
Funding Sources Summary Table

Task 1.1 revised 4/16/2008
Task 7.6 added 5/21/2008
Task 6.5 revised 8/27/2008

		SPR		PL		Sec. 5303		Sec. 5307			Other			Other		Sec. 5303 Carryover		Total		
Task #	Description	Federal	State	Federal	State/Local	Federal	State/Local	Federal	State/Local	(fn)	Federal	State/Local	(fn)	Federal	State/Local	Federal	State/Local	Federal	State/Local	Grand Total
1.1	MPO Administration			276,751	69,188	94,868	23,717											371,619	92,905	464,524
1.2	UPWP			40,000	10,000	20,000	5,000											60,000	15,000	75,000
1.3	VDOT Support	328,000	82,000							(1)	400,000	100,000						728,000	182,000	910,000
2.1	Transportation Public Participation			240,000	60,000			60,000	15,000									300,000	75,000	375,000
3.1	Maint & Use of 2030 Trans Models			24,000	6,000													24,000	6,000	30,000
3.2	Develop Hampton Roads 2034 LRP			272,000	68,000													272,000	68,000	340,000
4.1	TIP			56,000	14,000	52,000	13,000											108,000	27,000	135,000
5.1	Congestion Management Process			96,000	24,000													96,000	24,000	120,000
5.2	Transportation Demand Management			4,000	1,000	4,000	1,000											8,000	2,000	10,000
5.3	ITS Plan			40,000	10,000													40,000	10,000	50,000
5.4	Regional Freight Planning			44,000	11,000													44,000	11,000	55,000
6.1	Coordinated Human Services Trans Plan					16,000	4,000			(2)	52,069	13,017	(3)	29,980	7,495			98,049	24,512	122,561
6.2	HRT System Monitoring & Evaluation					120,000	30,000											120,000	30,000	150,000
6.3	WAT Monitoring & Evaluation					80,000	20,000											80,000	20,000	100,000
6.4	Feasibility/Corridor Studies							9,720,000	2,430,000									9,720,000	2,430,000	12,150,000
6.5	DBE Planning					40,000	10,000									38,818	9,705	78,818	19,705	98,523
6.6	ISO 14001:2004 Planning & Registration					40,000	10,000											40,000	10,000	50,000
6.7	HRT Transit Center Upgrades							400,000	100,000									400,000	100,000	500,000
6.8	Regional TDM - TRAFFIX									(4)		1,290,128						0	1,290,128	1,290,128
7.1	Critical Issues in Transportation			96,000	24,000													96,000	24,000	120,000
7.2	Non-Driver Transportation Study			40,000	10,000													40,000	10,000	50,000
7.3	Coliseum Central Traf Mgt Plan Study			64,000	16,000													64,000	16,000	80,000
7.4	Suffolk Corridor Studies			64,000	16,000													64,000	16,000	80,000
7.5	North Main Street Corridor Study			48,000	12,000													48,000	12,000	60,000
7.6	Multimodal Planning Grant									(6)	450,000	50,000						450,000	50,000	
8.1	Trans Database/GIS Activities			68,000	17,000													68,000	17,000	85,000
8.2	Regional Travel Time Study			8,000	2,000													8,000	2,000	10,000
9.1	Transportation Air Quality Planning			12,000	3,000					(5)		71,770						12,000	74,770	86,770
10.1	Transportation Technical Support			404,000	101,000	36,000	9,000											440,000	110,000	550,000
	Total	328,000	82,000	1,896,751	474,188	502,868	125,717	10,180,000	2,545,000		452,069	1,474,915		29,980	7,495	38,818	9,705	13,878,486	4,769,020	18,147,506

Local Match provided by Hampton Roads Planning District Commission, Hampton Roads Transit, and Williamsburg Area Transport.

(1) SPR Statewide
(2) Section 5316 Funds

(3) Section 5317 Funds
(4) Residual State Matching Funds for CMAQ Projects

(5) State Funds
(6) STP Funds